# HITACHI

## SERVICE MANUAL

PAL/SECAM/NTSC

YS | No. 0081C-E

**C29-F100** – 041, 051, 751, 081S, 121, 98*, 19*, 433, 941

V1-F Chassis

Note:
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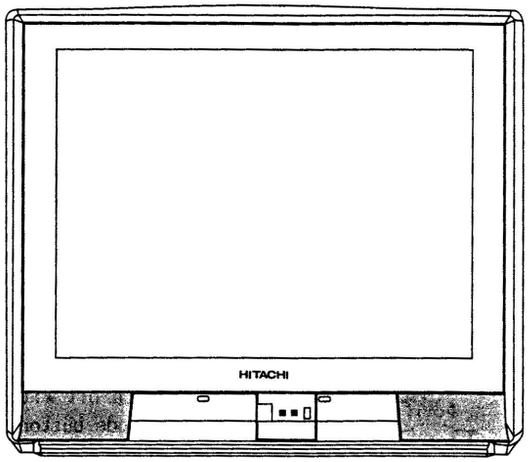


SUPER FLAT F100 SCREEN TV

**注　　意:** 开始检修电视机机芯以前，检修人员必须阅读这本检修手册中“有关安全上的预防事项”及“制品安全上的注意”两节。

**CAUTION:** Before servicing this chassis, it is important that the service technician reads the “Safety Precaution” and “Product Safety Notices” in this Service Manual.

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**SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.**

## COLOR TELEVISION

**February 1999**　　**Hitachi Consumer Products (S)**

# TECHNICAL CAUTIONS

## SAFETY PRECAUTIONS

**WARNING:** Since the chassis of this receiver is connected to one side of the Mains Supply during operation, service should not be attempted by anyone unfamiliar with the precautions necessary when working on this type of equipment. The following precautions should be observed.

1. Do not install, remove, or handle the picture tube in any manner unless shatter-proof goggles are worn. People not so equipped should be kept away while picture tubes are handled. Keep picture tube away from the body while handing.
2. When replacing chassis in the cabinet, all the protective devices are put back in place, such as; barriers, non-metallic knobs, adjustment and compartment cover or shields, isolation resistors-capacitors, etc.
3. When service is required, observe the original lead dress. Extra care should be taken to assure correct lead dress in the high voltage circuitry area.
4. Always use the manufacturer's replacement component. Especially critical components as indicated on the circuit diagram should not be replaced by other makes. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
5. Before returning a serviced receiver to the customer, the service technician must thoroughtly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the instrument by the manufacturer has became defective, or inadvertenly defeated during servicing. Therefore, the following checks are recommended for the continued protection of the customers and service technicians.

## INSULATION

Insulation resistance between the mains poles and any accessible metal parts should not be less than 7MΩ at 500V DC. Also, no flashover or breakdown should occur during the dielectric strength test, to apply 4KV AC for one minute between the mains poles and any accessible metal parts.

## X-RADIATION

**TUBES:** The primary source of X radiation in this receiver is the picture tube. The tube utilized in this chassis is specially constructed to limit X radiation.
For continued X radiation protection, the replacement tube must be the same type as the original, HITACHI approved type.

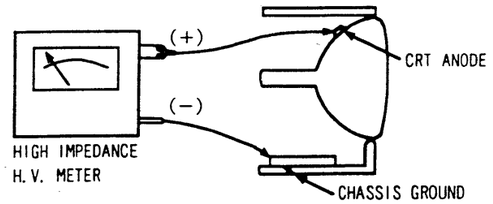
## High Voltage

This receiver is provided with a hold down circuit for clearly indicating that voltage has increased in excess of a predetermined value. Comply with all notes described in this Service Manual regarding this hold down circuit when servicing, so that this hold down circuit is operated correctly.

## Serviceman Warning

With minimum Black Level and Picture, the operating high voltage in this receiver is lower than 31.0K. In case any component having influence on the high voltage is replaced, confirm that high voltage with minimum Brightness and contrast is lower than 33.0kV. To measure H. V. use a high impedance H. V. meter. Connect (-) to chassis earth and (+) to the CRT anode button. (See the following connection diagram).

**NOTE:** Turn the power switch off without fail before the connection to the Anode button is made.




## PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in HITACHI television receiver have special safety related characteristics. These characteristics are often not evident from visual inspection nor can be protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.
Electrical components having such features are identified by marking with a ⚠ mark in the schematics and on the replacement parts list in this Service Manual. The use of a substitute replacement component which does not have the same safety characteristics as the HITACHI recommended replacement one shown in the parts list in this Service Manual, may create electrical shock, fire, X radiation, or other hazards.
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current HITACHI Service Manual. A subscription to, or additional copies of, HITACHI Service Manual may be obtained at a nominal charge from your HITACHI sales offices.



C29-F100

# TECHNICAL CAUTIONS

### High voltage limiter circuit operation check

1. Connect the high voltage voltmeter between the CPT anode (anode cap) and GND (CPT grounding lead).
2. Receive the broadcast signal and set the brightness and contrast VRs to max. Set the beam current to 1.6mA±10%.

   (After cut-off adjustment)
3. Set the AC input voltage to 220±3V.
4. Check that the constant high voltage is 29.5±1.0kV at this time.
5. Turn the switch of the set to off and connect the jig shown in Fig.3 at both ends of R964 as shown in Fig. 1.
6. With the brightness and contrast VRs left as set in item. 2 and with the AC input voltage stabilized at 220V. turn the picture disappears with a high voltage of 38.0kV or less.
7. Turn the switch of the set to off immediately after the check is completed.
8. Remove the adjust jigs and high voltage voltmeter.

**NOTE:** When connecting disconnecting the high voltage voltmeter to from the anode cap, be sure to turn the switch of the set off and do it after the residual high voltage is discharged to the chassis because the high voltage may remain at the anode cap.

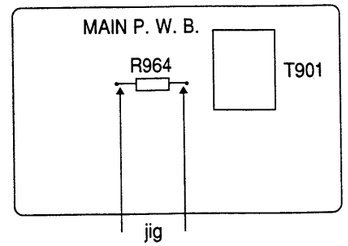



**Fig. 1**

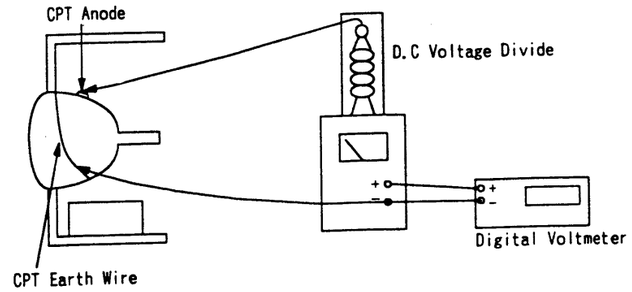



**Fig. 2**

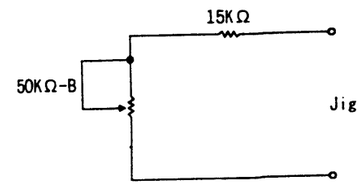



**Fig. 3**

## 有关安全上的预防事项

**警告**：因为在动作期间，这电视机的底盘与电源的一端互相连接，所以对检修这类型号的机器所必须的预防措施为下熟悉的人，不应该企图修机器。要检修必须遵守下列预防事项。

1. 要装人，取出或外理显象管时，必须带上防碎玻璃做的护目镜。外理显象管时，不带这护目镜的人不可接近。显象管应放在离开人体的地方。
2. 将底盘装入机箱里面时，所有的保护装置，如隔板，非金属的调整钮，小室盖子或小室屏蔽，隔离用电阻，电容器等，也应该装回去。
3. 开始检修之前，应该注意原来的引线包层。尤其是在高压电路部分需要特别小心，必须认清正确的引线包层。
4. 要检修，请一定要使用制造厂所指定的替换用机件。尤其在电路上注明几个特别重要的机件，要替换这些机件绝不可使用其他厂家的制品。当电路发生短路时，凡是有过热痕迹的机件都需要全部交换。
5. 将修好的电视机送回顾客以前，检修人员应该彻底检验机器以保证它完全安全，绝没有电击的危险，并确实检查机器内部的各种保护装置，以保证这些部分没有因检修而失灵。

由于上面理由，检修人员最好实行以下各项检查，以保证顾客和自己的安全。

**绝缘**

电源电极与任何可触及的金属部分之间的绝缘电阻不可小于7兆欧姆（加上直流500伏电压时）。而且，在电源电极与任何可触及的金属部分之间加上4千伏的交流电压（1分钟）而试验其绝缘强度时，不可发生闪络或绝缘击穿等现象。

**X射线**

**显象管**：这部电视机所产生的X射线，其主要的来源是显象管。所以这部电视机所使用的显象管有特别的构造设计，使X射线尽量减少。为了能继续防止X射线起见，要交换显象管时，请一定要使用相同型号的日立显象管。

**高压**

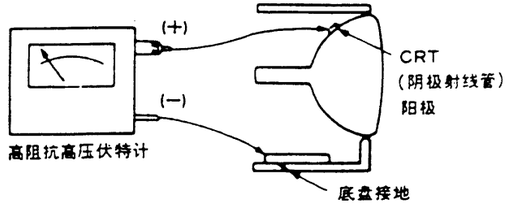
这电视机装有一个高压限制电路，可清楚地表示电压升高已超过额定值。进行维修服务时，请根据本维修说明书有关此高压限制电路的所有注解说明去做，则高压限制电路便可以正确地操作。

**维修人员须注意**

这电视机在最小黑色电平和图象电流时的高电压是在31.0kV以下的。若更换了会影响高压的部件时，一定请确认在最小亮度和对比度状况下的高电压是否低于33.0kV.

请使用高阻抗高压伏特计，令其（－）连接底盘接地线，令（＋）连接CRT（阴极射线管）阳极电钮，去测量高电压（H.V.）。（参考下面的连接图）。

**注**：当要连接到阳极电钮以前，一定要先把电源开关关掉。




## 有关制品安全上的注意事项

日立电视机所使用的许多机件具有有关安全的特别性能。这种特别性能在表面上往往看不出来，而且即使使用额定电压或功率更大的其他替换用机件，也不一定可得到这些日立机件所保证的保护性能。在这本检修手册里面有指定





这些具有特别安全特性的替换用机间。在这本检修手册的简图和替换用机件表上附带⚠记号的机件，就表示具备这种特别的安全特性。

如果不使用这本检修手册机件表上HITACHI所推荐的替换用机件而使用没有同样安全特性的其他替换用机件的话，就可能会发生电击，失火，X射线等事故。

HITACHI对制品安全不断努力改进，经常发出新的技术指令。如需要新的技术情报就请参看最新的HITACHI检修手册。可向HITACHI销售公司预订或订阅“日立检修手册”，只收取极少费用。

**技术上须注意事项**

**高压限压器电路操作检查**

1. 把高压伏特计连接在CPT阳极（阳极罩）和GND（CPT的接地线）之间。
2. 试接收一个电台的广播信号，且把亮度和对比度的VRs（可变电阻器）调到最大。把射束电流调为1.6mA ± 10%（切断调整之后）
3. 把AC电的输入电压调为220±3V。
4. 此时，检查恒定高压是否呈 29.5 ± 1.0kV。
5. 把设定开关关掉，然后把图3所示的夹具接在图1所示的R964的两端。
6. 以第2项所设定的亮度和对比度VRs，AC电流输入电压并保持稳定的220V状况下调节50kΩ可变电阻器以使影像消失掉，高压不可超过 38.0kV。
7. 检查完毕后，请立即关掉设定开关。
8. 卸下调整夹具和高压伏特计。

**注**：当把高压伏特计连接到阳极罩拆下时，必须先关掉设定开关,并且等残留高压电流都往底盘放电完毕之后，才进行接拆工作。因为阳极罩上在关掉设定开关后，还可能残留有高压电流。

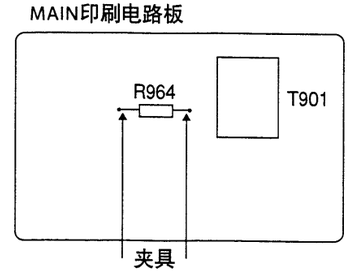



图 1

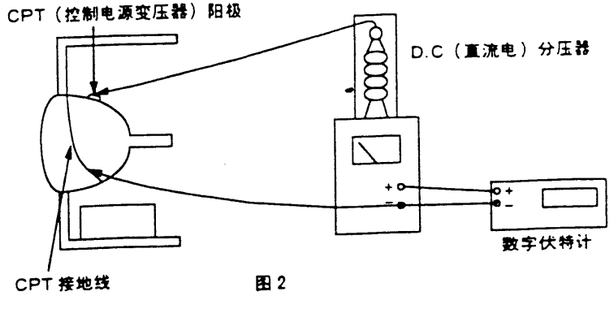



图 2

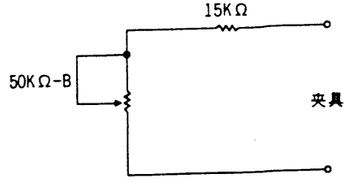


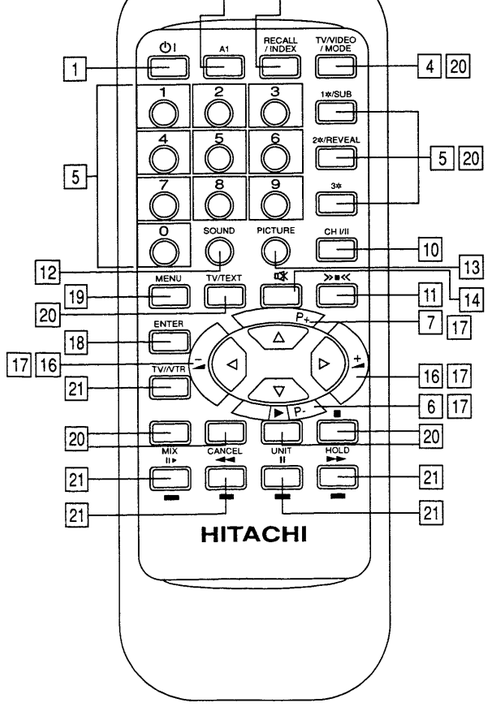

图 3

## SPECIFICATIONS (技术参数)

| | | | |
|---|---|---|---|
| Reception system | 625-LINES B.G/I/D.K/H PAL<br>B.G/D.K/K1 SECAM<br>NTSC50<br>525-LINES M/NTSC<br>NTSC3.58-5.5/6.0/6.5<br>NTSC4.43-5.5/6.0/6.5<br>PAL 60 | Antenna input | 75 Ω COAXIAL IEC TYPE |
| | | Colour picture tube | A68QCU259X / A68LQL185X |
| | | Speaker (cm) | 6 x 12 (x2) |
| | | Sound output | 7W x 2 |
| (Channel coverage<br>Frequencey range<br>44MHz-863MHz) | CCIR : E2~12, E21~69, S01~3, S1~41<br>Australia : AU0~12, AU28~69<br>OIRT : R1~12, R21~69<br>JAPAN : J1~12, J13~62<br>U.S.A. : US2~13, J~W, US14~69<br>Hong Kong, U.K. : UK21~69<br>China : C1~12, C13~57, Z1~38 | Power supply | 041, 941, 121 : AC 200V-240V 50Hz/60Hz<br>98*, 192, 195 : AC 110V-240V 50Hz/60Hz<br>081S, 051, 433 : AC 200V-240V 50Hz/60Hz<br>751 : AC 240V 50Hz<br>191 : AC 127V 50Hz/60Hz |
| | | Power consumption | 041 : 119W(IEC Rated 155W)<br>19*, 98*, 433 : 155W<br>051, 751, 941 : 155W<br>081S, 121 : 155W |
| | | Weight (kg) | 44kg |
| | | Dimensions W x H x D (mm) | 696 x 613 x 491 |

* Specifications are subject to change wihout notice to improve performance.

## REMOTE CONTROL UNIT (遥控发射器上之控制机件)



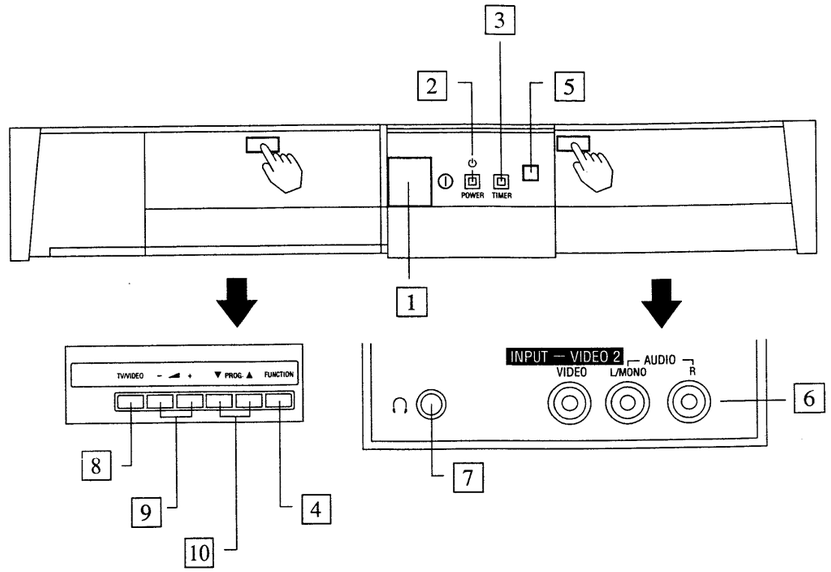

| | |
|---|---|
| 1 | POWER ON/OFF SWITCH<br>电源开关 |
| 2 | RECALL<br>召回 |
| 3 | AI (For other models)<br>电脑控制（适用于其他型号） |
| 4 | INPUT SELECTION<br>输入选择 |
| 5 | PROGRAMME SELECTOR<br>节目选择 |
| 6 | PROGRAMME DOWN<br>节目降 |
| 7 | PROGRAMME UP<br>节目升 |
| 10 | CH I/CH II (051/751/081S/982 only)<br>CH I/CH II (051/751/081S/982 适用) |
| 11 | SPATIALIZER (For other models)<br>环绕声（适用于其他型号） |
| 12 | SOUND<br>声音 |
| 13 | PICTURE<br>图像 |
| 14 | MUTE<br>静噪 |
| 16 | VOLUME UP/DOWN<br>音量升/降 |
| 17 | CURSOR<br>光标 |
| 18 | ENTER<br>决定 |
| 19 | MENU<br>菜单 |
| 20 | TELETEXT OPERATING KEYS (081S/982 only)<br>图文电视（081S/982 适用） |
| 21 | VTR OPERATING KEYS (For other models)<br>录象机专用钮（适用于其他型号） |

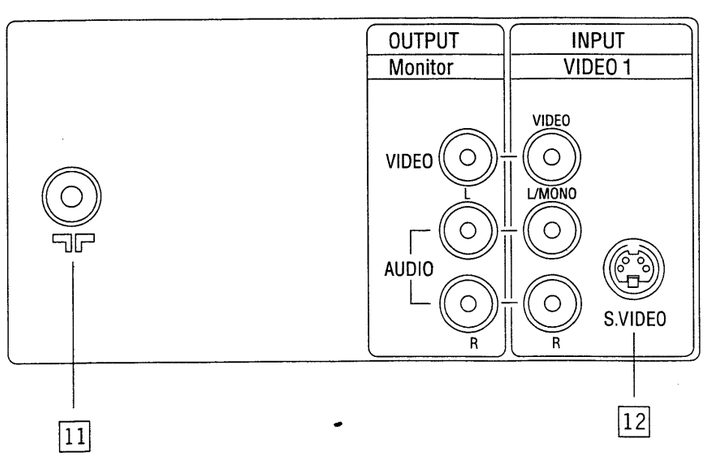




## CONTROL
## （各种调整控制机件）

### Front Panel
### 电视机的前面板



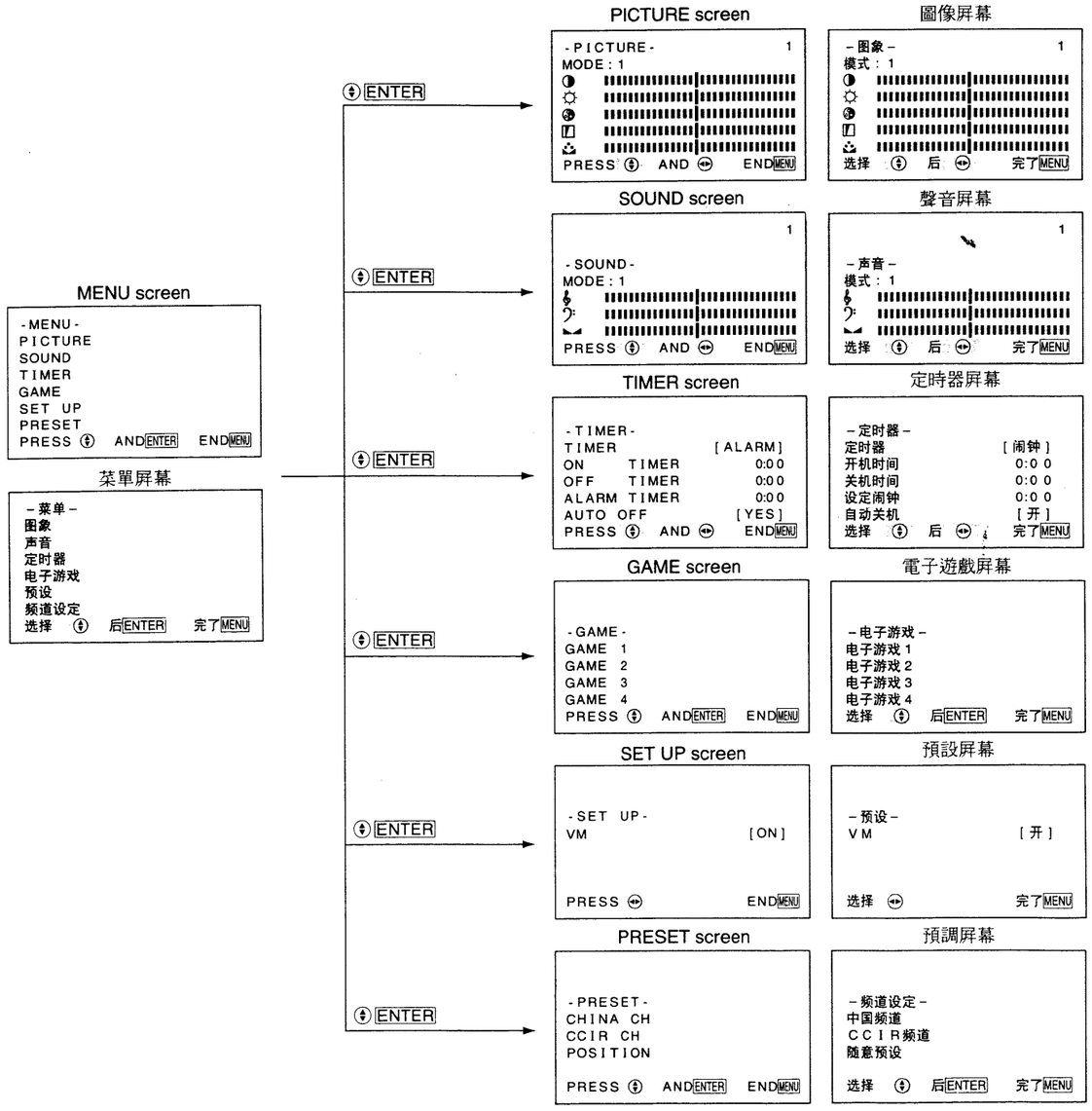

### Rear Panel
### 电视机的后面板

| | |
|---|---|
| 1 | POWER ON/OFF SWITCH<br>电源开关 |
| 2 | POWER STANDBY INDICATOR<br>电源/等待指示灯 |
| 3 | TIMER INDICATOR<br>定时指示灯 |
| 4 | FUNCTION<br>功能键 |
| 5 | REMOTE CONTORL RECEIVER<br>遥控接收部 |
| 6 | INPUT 2 INPUT TERMINAL<br>INPUT 2 输入端子 |
| 7 | HEADPHONE JACK<br>耳机插座 |
| 8 | INPUT SELECT<br>输入选择 |
| 9 | VOLUME UP/DOWN<br>音量升/降 |
| 10 | PROGRAMME UP/DOWN<br>节目升/降 |
| 11 | ARIAL TERMINAL<br>天线端子 |
| 12 | AV IN/OUT TERMINALS<br>AV 输入/输出端子 |

## GENERAL OPERATIONS GUIDE (基本操作简介)

With this TV set, all adjustments/settings are performed by selecting from menu screens.
Different menu screens and details of adjustments/settings are shown below. To access the menu screen, press the MENU button, then select the item by pressing the cursor buttons and set it by pressing the ENTER button.

在使用本電視機時，所有調整／設定都可從菜單屏幕上選擇。
各種菜單屏幕以及調整／設定的細節，如下所示。您可先按下 MENU 鍵以進入菜單屏幕，然後按下游標鍵以選擇所要項目，並按下 ENTER 鍵以確認設定。







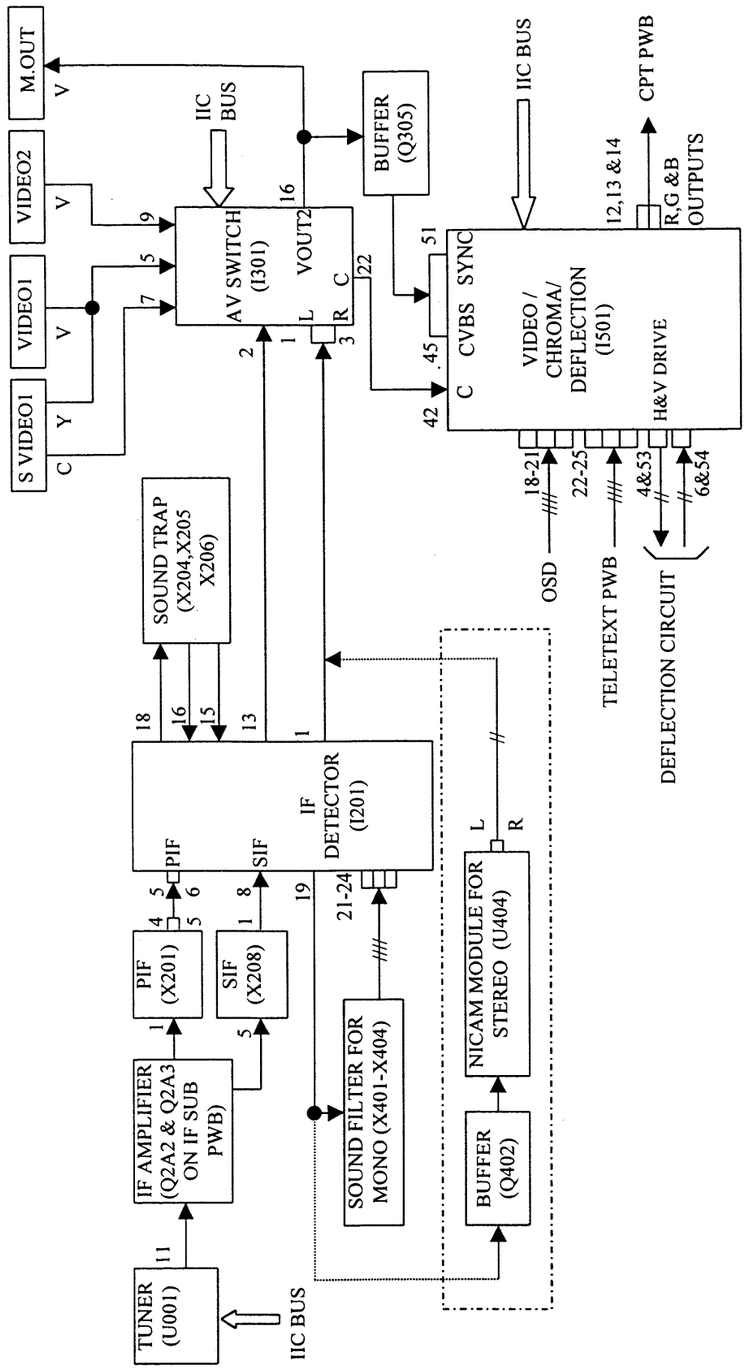

## CIRCUIT DESCRIPTION
## (电路说明)

### Selection and CPU circuitry

IC type, M37221MA, performs functions like IIC controls, channel selection, on-screen displays, search tuning, systems selection amongst others. The pin functions of M37221MA is presented in table form as shown below :

| PIN NO. | NAME | I/O | FUNCTION |
|---|---|---|---|
| 1 | H.BLK | Input | Horizontal synchronous signal i/p pin for OSD |
| 2 | V.BLK | Input | Vertical synchronous signal i/p pin for OSD |
| 3 | RETURN1 | Input | Return signal of front panel matrix |
| 4 | RETURN2 | Input | Return signal of front panel matrix |
| 5 | COMB | Output | Output for NTSC and VIDEO signal |
| 6 | TIMER | Output | Output for timer LED. H : timer set, L : normal |
| 7 | N.C. | | |
| 8 | ON_OFF MUTE | Output | Mute control during power on/off |
| 9 | V.M Cont. | Output | Velocity Modulation control on/off |
| 10 | R/C | Intput | Remocon serial data i/p from receiver unit |
| 11 | SYNC | Input | Horizontal signal i/p. Used to detect presence of RF signal after A/D conversion |
| 12 | 50/60 | Output | Forced output to control frequency of receiving picture |
| 13 | SCAN1 | Output | Output signal at front panel to control program up/down |
| 14 | SCAN2 | Output | Output signal at front panel to control volume up/down |
| 15 | SCAN3 | Output | Output signal at front panel to control Function & TV/VIDEO keys |
| 16 | POWER | Output | Power ON/OFF control. H: ON, L : OFF |
| 17 | BEEP | Output | BEEP sound o/p. L:off, PWM 50% duty cycle : ON |
| 18 | GND | | |
| 19 | X.IN | Input | Clock in |
| 20 | X.OUT | Output | Clock out |
| 21 | GND | | |
| 22 | Vcc | | |
| 23 | S-DET | Input | S VIDEO input detect. |
| 24 | N.C. | | |
| 25 | RESET | Input | Resets MCU via RESET IC, l003. H: normal, L : RESET |
| 26 | CH.MUTE | Output | Mute control during channel change |
| 27 | SPATIALIZER | Output | Spatializer control o/p |
| 28 | N.C. | | |
| 29 | AFC | Input | AFC voltage i/p. Used together with SYNC to detect presence of RF signal after A/D conversion |
| 30 | N.C. | | |
| 31 | SW1 | Output | Select main signal system |
| 32 | SDA_1 | I/O | IIC data i/o |
| 33 | SW2 | Output | Select main signal system |
| 34 | SCL_1 | I/O | IIC clock select |
| 35 | SW3 | Output | Select main signal system |
| 36 | SW4 | Output | Select main signal system |
| 37 | SDA | I/O | IIC data i/o for EEPROM |
| 38 | SCL | I/O | IIC clock select for EEPROM |
| 39 | BLK | Output | OSD blanking output signal |
| 40 | B | Output | Blue output for OSD |
| 41 | G | Output | Green output for OSD |
| 42 | R | Output | Red output for OSD |

## BLOCK DIAGRAM FOR SIGNAL CIRCUIT








## TUNER AND IF CIRCUIT

The tuner(U001) used on this chassis is powered by the 9V supply, it is IIC Bus controlled and covers VHF, UHF and CATV Band(Mid, Supper and Hyper).
The IF circuit consists of SAW X201, SAW X208, Q2A2, Q2A3 and I201(LA7566).
The IF output from tuner(pin 11 of U001) is applied to amplifiers Q2A2 for PIF and Q2A3 for SIF(both amplifiers are on IF Sub PWB) through E2A1 connector. Outputs of amplifiers return through E2A2 and connected to SAW filter X201(PIF) and X208(SIF). At the input of X201(PIF), Q205 serves to select the systems between(B/G,I, D/K) or (M).
After that, demodulation and sound systems selection are made at I201(LA7566).
For mono sound system, the output of I201 at pin 19 is sent out a series of bandpass filters to select required sound system(B/G, I,D/K or M). The selected signal(pin 21 or 22 or 23 or 24) is then demodulated in I201. The sound output is given at pin 1.
For stereo sound system, the output of pin 19 is sent to buffer amplifier(Q402) and output is then connected to NICAM MODULE(U404) where sound system selection and demodulation are made.
At I201, sound systems selection are as follow :

| | B/G | I | D/K | M |
|---|---|---|---|---|
| I201 pin 22 | H | H | L | L |
| I201 pin 23 | H | L | H | L |
| Q205 Base | L | L | L | H |

SIF signal is removed by using sound trap filters(X204, X205 and X206) and giving B/G, I, D/K video signal at pin 15 and M video signal at pin 16.
Those video signals are switched internally and give output at pin 13 of I201.

## VIDEO/CHROMA

Composite video signals from RF, Video 1 and Video 2 entered I301 via pin 2, 5 and 9 respectively. However, S Video 1 send Y and C signals separately to I301 via pin 7 and pin 5. The same pin(pin 5) is used for Y signal with S Video 1 and V signal with Video 1.
At I301, which input signals(RF, S Video 1, Video 1 or Video 2) to be proceeded are selected and then, transferred to I501 via pin 16. These selection procedures are controlled by IIC Bus.
If one of the signal(RF, Video 1 or Video 2) is selected at I301, I501(TB1226AN) will receive composite video signal at pin 45, 42 and 51. Y/C separation is performed internally.
If the signal selected at I301 is S Video 1, I501 will receive C signal at pin 42 and Y signal at pin 45 and 51. Therefore, Y/C separation is not required.

| IC | I301 | | | | | | I501 | | |
|---|---|---|---|---|---|---|---|---|---|
| I/O | Input | | | | Output | | Input | | |
| Pin no. | 2 | 5 | 7 | 9 | 16 | 22 | 45 | 42 | 51 |
| RF | V | - | - | - | V | V | V | V | V |
| Video 1 | - | V | - | - | V | V | V | V | V |
| Video 2 | - | - | - | V | V | V | V | V | V |
| S Video 1 | - | - | Y | - | Y | C | Y | C | Y |

V = Composite Video Signal
Y = Luminance Signal
C = Chroma Signal

I501(TB1226AN) which incorporates VIDEO/ CHROMA/DEFLECTION is used to perform auto color identification of PAL/SECAM/ NTSC,sync separation, AFC, H/V oscillator and output stage RGB signals etc... IIC Bus has controlled over this I501 i.e. Brightness, Contract, Color, Sharpness and Tint can be changed.
For all systems(PAL/SECAM and NTSC), Y and C are separated by using bandpass and trap method, which can change each center frequency internally in I501. And also in I501, color identification and decoding are performed with internal 1HDL and x'tal 16.2 MHZ at pin 40 instead of conventional 4.43 MHZ for PAL/SECAM and 3.58 MHZ for NTSC x'tal. After that, the result R, G, B signals are then combined with OSD R,G,B signals from pin 18~20 and T/Text R,G,B signals from pin 23~25 by switching operation at pin 21(D YS), pin 22(A YS).
The outputs are finally emerged from pin 12 ~14 as the R, G and B. Then, R, G and B output signals are sent to CRT PWB.
Internal sync separator and H/V oscillator of I501 produce H drive and V drive signals which are sent to Deflection circuit for processing of Horizontal and Vertical scanning.

## HORIZONTAL DEFLECTION

This circuit used the horizontal deflection yoke(H. DY) to deflect the electron beam of the CRT horizontally. It also generates high-voltage and medium/low voltage power supplies through FBT.
At pin 51 of I501, the composite video signal from Q305 is applied to the internal sync. separator and phase detector/correction of I501, the resulted horizontal drive pulse is output from pin 4 of I501.
The horizontal drive pulse is supplied to the horizontal drive circuit consisted of Q708, Q709 and T701.
At the horizontal output tansistor Q708, it generate a FBT pulse of approximately 1100V at the collector and also cause sawtooth current to flow to the H. DY, thus deflecting the electon beam in the CRT horizontally.
This FBT pulse also causes a high voltage (H. V) and medium/low voltages(i.e 200V, 56V, 11V, 25V) to be generated at the secondary circuit of the FBT T702.
The pincushion distortion correction circuit in this chassis is to increase the H. DY current to correct the pincushion distortion at both sides of screen. The verticall sawtooth wave of the V. DY is input to Q665 and output as a parabolic wave. This parabolic wave modulates the horizontal pulse voltage at the cathode of diode modulator D703 through Q663, Q662 and Q661 with a vertical period to vary the H. DY voltage. The high-voltage beam current is supplied from +B(130V) to the ACL(Automatic Contrast Limiter) terminal of FBT. This produces a voltage proportional to the variations in the brightness at the ACL terminal. This voltage is applied to Q664, Q663 to correct meandering of the picture due to changes in brightness and also apply to Q663 through R663 to correct the size due to brightness change.

## VERTICAL DEFLECTION

At I501, the composite video signal from pin 51 are applied to the internal integrated circuit, V separation circuit and V C/D circuit which counts down the horizontal frequency to obtain the vertical frequency. C6A2 at pin 52 of I501 is used for ramp generation, and produces the required sawtooth waveform output from pin 53.

The vertical drive output from pin 53 of I501 is applied to pin 4 of I601 via R6A2, and the vertical output to drive the DY is made available at pin 2. The voltage switching circuit in I601 increases the power voltage at pin 3 during the flyback period to make the flyback line faster.
The V deflection voltage that occurs is added to the DC voltage from pin 2 of I601, the result is applied to pin 54 of I501 and determine the linearity and vertical height.

## POWER SUPPLY CIRCUIT

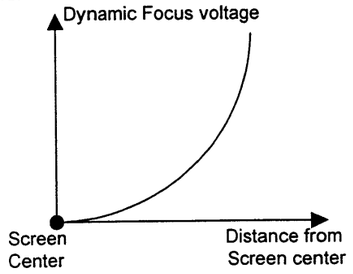
The power supply circuit of V1 chassis is as below.
(1) Starting Operation.
Power switch S901 turned ON → Rectified at D901~D904 → Voltage at Q903 base rises → First switching pluse generated at winding P1-P2 of T901 → Drive voltage → Provide to Q905 of winding B1-B3 of T901 → Q905 supply stable drive voltage and L903 provide drive current to Q903 base → Come into normal operations .
(2) Switching Constant Voltage Operation.
AC input voltage rises or +B load decreased (picture get dark) → +B(130V) rises → Ic increased at Q951 → Id increased at IC901 → Ic increased at IC901 → Voltage decreased at pin 5 of IC901 → ON period of Q901 increased → ON period of Q903 decreased → Positive voltage of D951 anode decreased → +B voltage falls → +B voltage stabilized.
(3) Standby Operation.
Remote control power OFF → I001 pin 16 ↘ → Q954 off → Q953 off → I501 Vcc pin 3 ↘ → Horizontal deflection stopped. Also → Q952 off → R965 connect into R964 → Voltage of Q951 base rises → ON period of Q903 is slightly decreased by IC901 → +B voltage falls(about 65V) → Power consumption decreased.
+5V power provided from T901(S2) winding through D952 and C954 → 5V at pin 22 of I001 stabilized by I004.





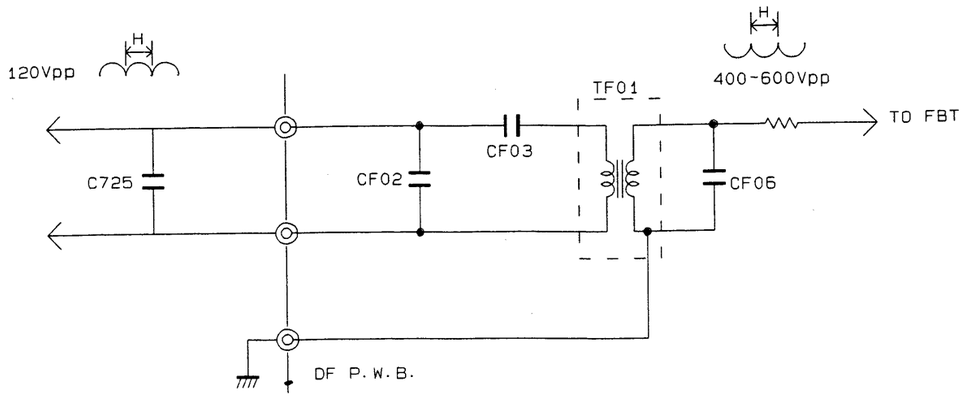
## DYNAMIC FOCUS CIRCUIT

In a CRT, the focus electrode potential must be adjusted to produce a finely focused dot on the face of the tube. The distance between the electron guns and the tube face increases as the beam is deflected forwards the extremities of screen. This means that the optimum Dynamic Focus voltage varies according to the part of the screen being scanned.
i.e.




Due to above, the variation in focus between the center and the extremities of the screen is always a problem, especially in Flat CRT.

In C29-F100 chassis, the following Dynamic Focus circuit is used to improve the focus at the horizontal extremities of CRT by adding a parabolic voltage waveforms at the horizontal scan frequency on focus voltage.
To obtain a dynamic focus waveform, a waveform from the horizontal output circuit across C725 is supplied to Dynamic Focus Transformer TF01 through CF03.
After the TF01, the parabolic secondary voltage of TF01 is supplied to Dynamic Focus pin of CRT through Flyback Transformer T702, and optimize focus at the left and right extremities of screen.



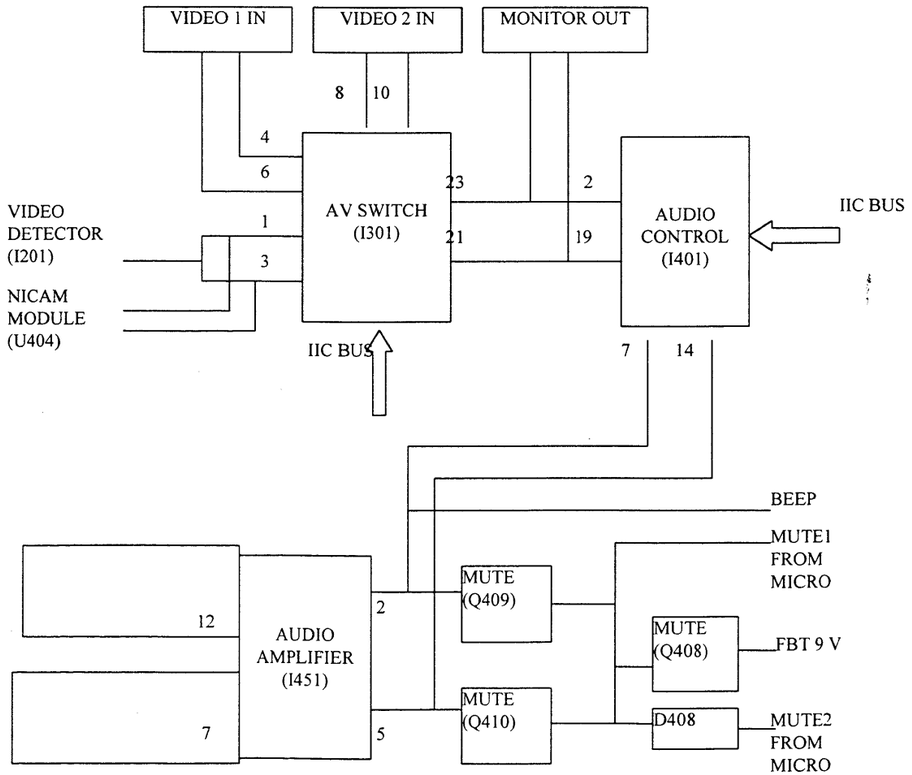

**DYNAMIC FOCUS PWB CIRCUIT**

## AUDIO CIRCUIT

The AV switch I301 receive audio signals from the following 3 locations:
(1) Mono sound from I201 pin 1, 3 or Stereo sound from U404(Nicam/A2 module) pin1(L) pin 3(R).
(2) Video 1 in via pin 4(L1) and pin 6(R1).
(3) Video 2 in via pin 8(L2) and pin 10(R2).

The signals to be proceeded are selected in I301. I301 is controlled by IIC bus. Outputs of I301, pin 21 & 23, are sent both to Monitor out and pin 2 & 9 of Audio Control(I401). IIC bus control I401 for volume, left and right audio output, treble and bass outputs.

L-out and R-out of I401, pin 7 and pin 17 respectively, are joined with MUTE control transistors(Q408, Q409 and Q410). These transistors are controlled by Micro IC(I001). When mute is requested Q409 and Q410 are grounded and no signal is sent to audio amplifier(I451) and made audio mute possible. Otherwise, signals are sent to pin 2 and 5 of audio amplifier I451. After amplification of audio signals, they are then sent out as audio outputs of system via pin 12 and 7 to headphone and speakers.








**NICAM / A2 (For NICAM / A2 models only)**

The analog sound IF signal is being inputted to a high pass filter. It has a frequency response whereby the chroma signal will be suppressed to prevent interference. The signal is amplified before injected into the IC1.

The SIF signal after received by IC1 will perform either a digital or analog demodulation based on the carrier frequency being identified. The table below shows the standard specifications of different systems.

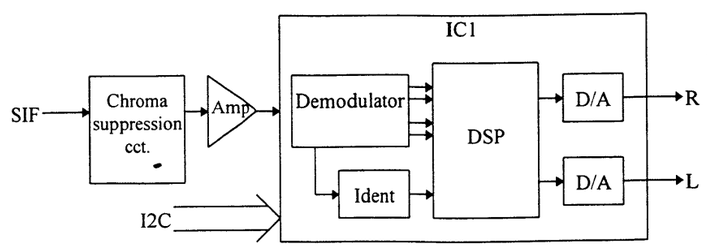
| No. | Specification | NICAM | | A2 | |
|---|---|---|---|---|---|
| | | UK | Scadinavia / Spain | Channel FM1 | Channel FM2 |
| 1 | Carrier frequency | 6.552MHz | 5.85MHz | 5.5MHz | 5.7421875Mhz |
| 2 | Carrier frequency of analog sound component | 6.0Mhz FM mono | 5.5Mhz FM mono | - | - |
| 3 | Vision/sound power difference | 10dB | 13dB | 13dB | 20dB |
| 4 | Pilot carrier frequency | - | - | - | 54.6875kHz |
| 5 | Modulation frequency | - | - | - | mono: unmodulated stereo : 117.5Hz dual : 274.1Hz |

In NICAM system, the digital encoded data contains the information bits on NICAM, Stereo, Bilingual or FM mode. It can be selected using remote controller, either CH I / II / FM. The system will automatically switch to stereo mode if the error received exceeds a certain limit.

Whereas in A2 system, a pilot carrier frequency imposed on the FM2 Channel shows the present of stereo and bilingual sound. The mode of operation depends on the modulation frequency received and user's selection.

| Remote controller | NICAM | A2 |
|---|---|---|
| CH I | NICAM STEREO | A2 STEREO |
| CH II | BILINGUAL | BILINGUAL |
| FM | FM mono | FM mono |

After demodulation and decoding, the sound is being outputted to the L and R channel. All the IC1 operation is being controlled by I2C bus.



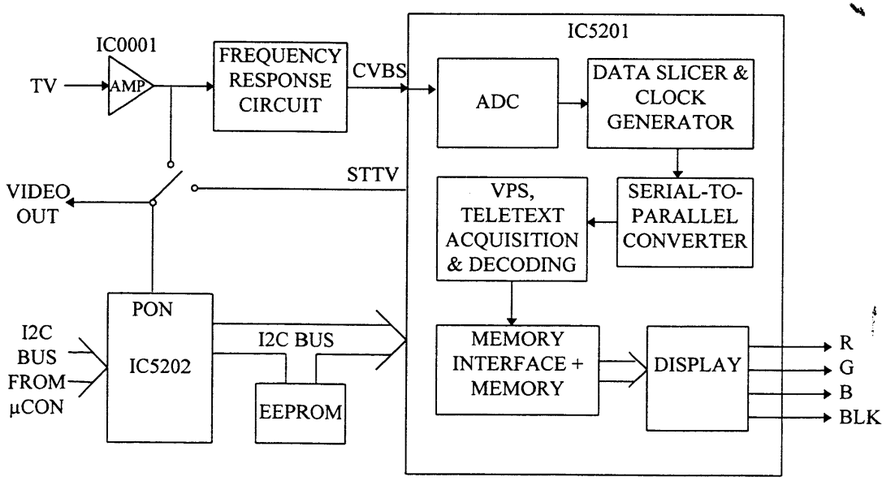

Block diagram of the NICAM/A2

## Teletext Circuit (T/TEXT models only)

In teletext mode, the tv signal is being amplified by the IC001. The signal after amplification is injected into the frequency response circuitry for better reception. It is received by IC5201 where acquisition, decoding and data processing are being performed. The RGB and Blk signals are outputted.

On the other hands, IC5202 received the commands from the main µcon through I2C Bus. It analyzed and re-decoded the commands for controlling IC5201 operation.

Whereas in Mix and TV modes, a "HIGH" is outputted from IC5202 to switch on Q006. The signal that had been amplified is redirected to the video out pin.




Block diagram of Teletext decoder

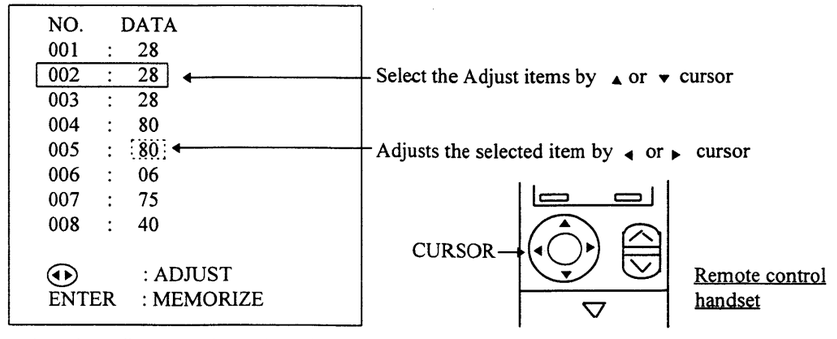




# ADJUSTMENT INSTRUCTIONS
# （调整说明）

## IIC ADJUSTMENTS

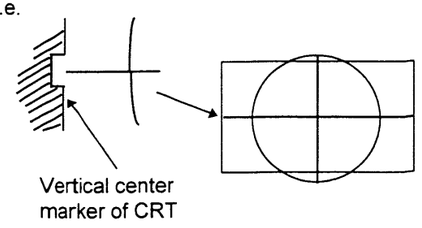
Most of the adjustment items in V1 chassis are control by IIC. Any changes on CRT, CPU IC, Video/Chorma IC or V. deflection IC(I601), please readjust the items shown in table 1(Pg. 21). To start the IIC adjustment, please ensure the AC power switch is at "off" position. Press the [TV/VIDEO] button on the front panel and then press the power switch while pressing [TV/VIDEO] button. Release all buttons after the following displays appeared on screen.



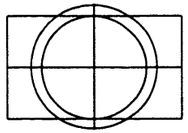
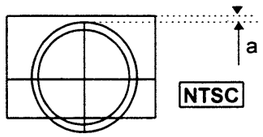

To select the adjustment items(e.g. H. phase, sub-brightness level etc...), press the ▲ or ▼ cursor button on Remote control handset. To adjust the data of selected item, press the ◄ or ► cursor button on Remote control handset.

After completed the adjustments, press the [ENTER] button on Remote control handset (memorized). Press [MENU] button or turns off the TV set to end the IIC adjustment.

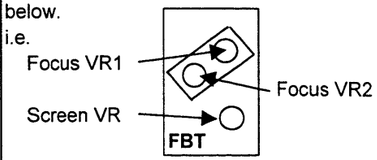
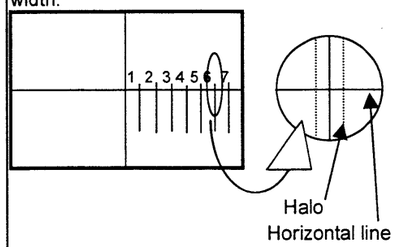
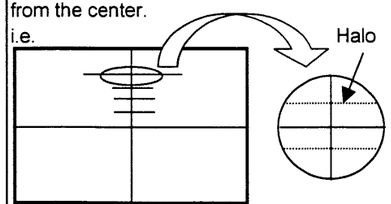
### VERTICAL CENTER ADJUSTMENT

| PREPARATION | PROCEDURES |
|---|---|
| 1. Turns on the TV set & heat run about 5 min.<br>2. Receive the circular pattern signal.<br>3. AC 220+ - 1v. | 1. Select the IIC control address No 54.<br>2. Set the horizontal center line to vertical center marker of CRT by adjustment of IIC.<br>i.e.   |

**VERTICAL SIZE ADJUSTMENT**

| PREPARATION | PROCEDURES |
|---|---|
| 1. Turns on the TV set & heat run about 5 min.<br>2. Receive circular pattern signal (PAL).<br>3. Set all picture settings to normal condition (i.e. Brightness : Center, Contrast : Max<br>4. AC 220 +-1V | 1. Select the IIC control address No 55.<br>2. Adjust IIC data to obtain the following condition.<br>i.e.<br>  <br><br>PICTURE TOP : Inner circle reach the edge of TV raster.<br>PICTURE BOTTOM : Inner circle reach the edge of TV raster.<br>3. Receive the NTSC circular signal, and check the picture size after the above V size adjustment.<br>4. If a > 0mm, go back to IIC control No 54(V-center adjustment), increase the IIC data by 1 position.<br>  <br> |

**DOUBLE FOCUS ADJUSTMENT**(Adjust after the Vertical Size adjustment)

| PREPARATION | PROCEDURES |
|---|---|
| 1. Turns on the TV set & heat run about 5 min.<br>2. Receive the Cross Latch pattern signal.<br>3. AC 220 +- 1V.<br>4. Turns the black level to the very point where background of Cross Latch pattern becomes dark.<br>5. The sketch of FBT with VR1 & VR2 is as below.<br>i.e.<br>  <br> | 1. Turns the Focus VR2 gradually clockwise until the halo of the number 6 vertical line disappear and horizontal line is at min. width.<br>  <br><br>2. Turns the Focus VR1 gradually clockwise so that no halo of Horizontal center line appears and width of the horizontal line(*) becomes min..<br>*the position cross to fourth horizontal line from the center.<br>i.e.<br>  <br> |





**+B ADJUSTMENT**

| PREPARATION | PROCEDURES |
|---|---|
| 1. AC input voltage 220+-5V(50HZ).<br>2. Turns on the set and set the brightness and contrast to Max. (Signal : PHILIPS Pattern)<br>3. After 30 sec heat-run, check & adjust the +B voltage.<br><br>**Measuring Point** :<br>+B voltage : C953 + side<br>GND : C953 - side | 1. Adjust VR951 to obtain +B voltage as below.<br><br>+B voltage = 130 +-0.3V |

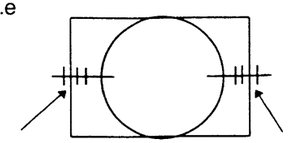
**SIDE PIN-CUSHION DISTORTION ADJUSTMENT**

| PREPARATION | PROCEDURES |
|---|---|
| 1. Perform this adjustment after the purity and convergence adjustment.<br>2. Receive the circular pattern signal.<br>3. Set the Contrast to max. and Back level to normal.<br>4. The horizontal size adjustment.<br>5. Set the horizontal size VR R657 to the mechanical center.<br>6. Perform this adjustment after the Vertical size adjustment. | 1. Adjust R656 so that all vertical lines except the lines at both the left and right ends are straight.<br>2. Receive the Cross Hatch signal, check that the verticial lines are straight except the 1st outer vertical line(R/L). |

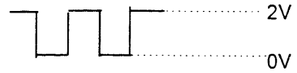
**HORIZONTAL CENTER ADJUSTMENT**

| PREPARATION | PROCEDURES |
|---|---|
| 1. Perform this adjustment after the Side pin adjustment.<br>2. Receive the circular pattern signal. | 1. Select the IIC control address No 06.<br>2. Adjust the picture center to meet the CRT geometrical center. |

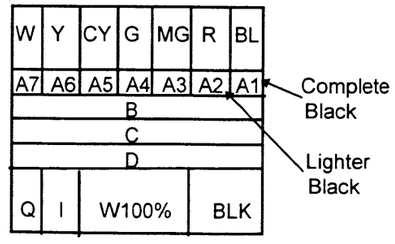
**HORIZONTAL SIZE ADJUSTMENT**

| PREPARATION | PROCEDURES |
|---|---|
| 1. Perform this adjustment after H. center adjustment.<br>2. Receive the HITACHI circular pattern signal(PAL).<br>3. Set the Contrast at Max, and others at 0(center). | 1. Turn R657 to Max(clockwise).<br>2. Adjust R657 so that the average reading of right and left is 1.5 ~ 2.0.<br>i.e<br>  |

## WHITE BALANCE ADJUSTMENT

| PREPARATION | PROCEDURES |
|---|---|
| 1. Switch on the TV set for at lease 20mins.<br>2. Adjust this adjustment after the Purity adjustment.<br>3. Ensure the vertical incident illuminatin on CRT surface to be 20 lux or less.<br>4. Receive the white balance raster.<br>5. Set the following settings by Remote control handset.<br>Contrast : Max<br>Brightness : Center<br>Color : Min | 1. Connect and measure the waveform at No.5 pin of connector PY1(or pin 14 of I501).<br>2. Select the IIC Control address No 01(Cut-off red) and adjust the data to obtain the following waveform at pin 5 of PY1.<br>  <br>2V<br>0V<br>3. Select the IIC control address No 02(Cut-off green) and No 03(Cut-off blue), adjust both datas to the same data number as in address No 01.<br>4. Select the IIC control address No 04(Blue drive) and No 05(Red drive), adjust both datas to 80.<br>5. Turn the screen VR of FBT fully counter-clockwise.<br>6. Press the TV/VIDEO button 3 times to obtain the lateral line mode.<br>7. Turn the screen VR clockwise and set it to the position where the bright colored line starts to appear.<br>8. Release the lateral line mode by pressing TV/VIDEO button once.<br>9. Set the W/B meter probe at the center of the screen.<br>10. Do the W/B adjustment to the desired W/B color temperature by using the following keys of IIC.<br>IIC Adress No<br>R BKG 01<br>G BKG 02<br>B BKG 03<br>R DRIVE 04<br>B DRIVE 05<br>Note : To obtain the low brightness and high brightness conditions, adjust the Brightness control of remote control handset. |

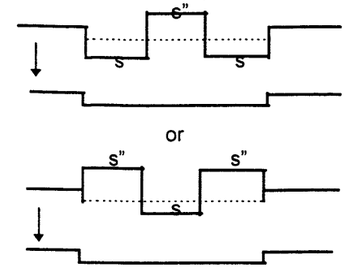
## SUB-BRIGHTNESS ADJUSTMENT

| PREPARATION | PROCEDURES |
|---|---|
| 1. Swith on the TV set for at lease 20mins.<br>2. Adjust this adjustment after the Horizontal size and Side pin cushion adjustment.<br>3. Ensure the vertical incident illumination on CRT surface to be 20 lux or less.<br>4. Receive color bar pattern signal.<br>5. Set the following settings by remote control handset.<br>Contrast : Min<br>Color : Min<br>Brightness : Center | 1. Select the IIC control address No. 09.<br>2. Adjust the data until A1 portion becomes black and A2 portion becomes lighter black.<br>i.e<br>  <br> |





## SUB-TINT ADJUSTMENT

| PREPARATION | PROCEDURES |
|---|---|
| 1. Receive the color bar signal (NTSC).<br>2. Set the following settings by Remote Control handset.<br>Contrast : Max<br>Tint : Center<br>Color : Center<br>Black Level : Center<br>Sharpness : Center | 1. Connect and measure the waveform at pin 5 of EY1(R signal).<br>2. Select the IIC address No. 08.<br>3. Adjust the data to obtain the following waveform (s and s" to same level).<br>  <br> |

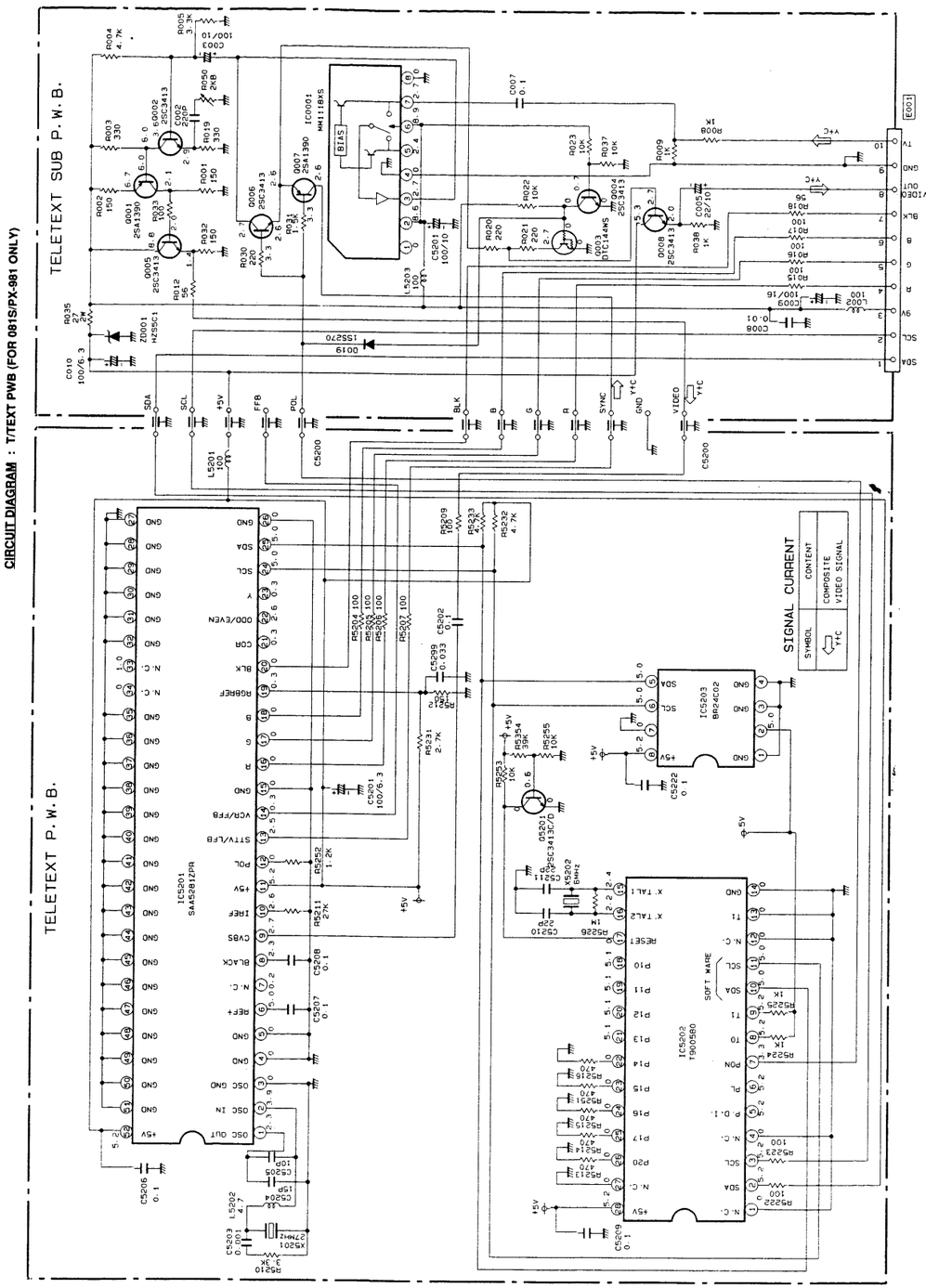
## TABLE 1 : IIC-BUS CONTROL/ADDRESS

| ADJ No. | NAME OF ADJUSTMENT | DATE (INITIAL) | ADJUST WHEN CHANGE | | |
|---|---|---|---|---|---|
| | | | MEMORY | CPT | V/C IC |
| | | | I002 | V1 | I501 |
| 1 | R CUT OFF | 0~255 (0) | O | O | O |
| 2 | G CUT OFF | 0~255 (0) | O | O | O |
| 3 | B CUT OFF | 0~255 (0) | O | O | O |
| 4 | G DRIVE GAIN | 0~255 (80) | O | O | O |
| 5 | B DRIVE GAIN | 0~255 (80) | O | O | O |
| 6 | HORIZONTAL POSITION | 0~31 (10) | O | O | X |
| 38 | R-Y SECAM W/B | 0~15 (8) | O | X | X |
| 39 | B-Y SECAM W/B | 0~15 (8) | O | X | X |
| 54 | V. POTISION | 0~7 | O | O | O |
| 55 | V. SIZE | 0~127 (40) | O | O | O |
| 57 | V. S CORECTION | 0~127 (40) | O | O | O |
| 59 | V LINEARITY | 0~31 (0) | O | O | O |
| 80 | MUTE MODE | 0~3 | O | X | X |

Note : Do not adjust other ADJ. NO. except the items shown in table 1.

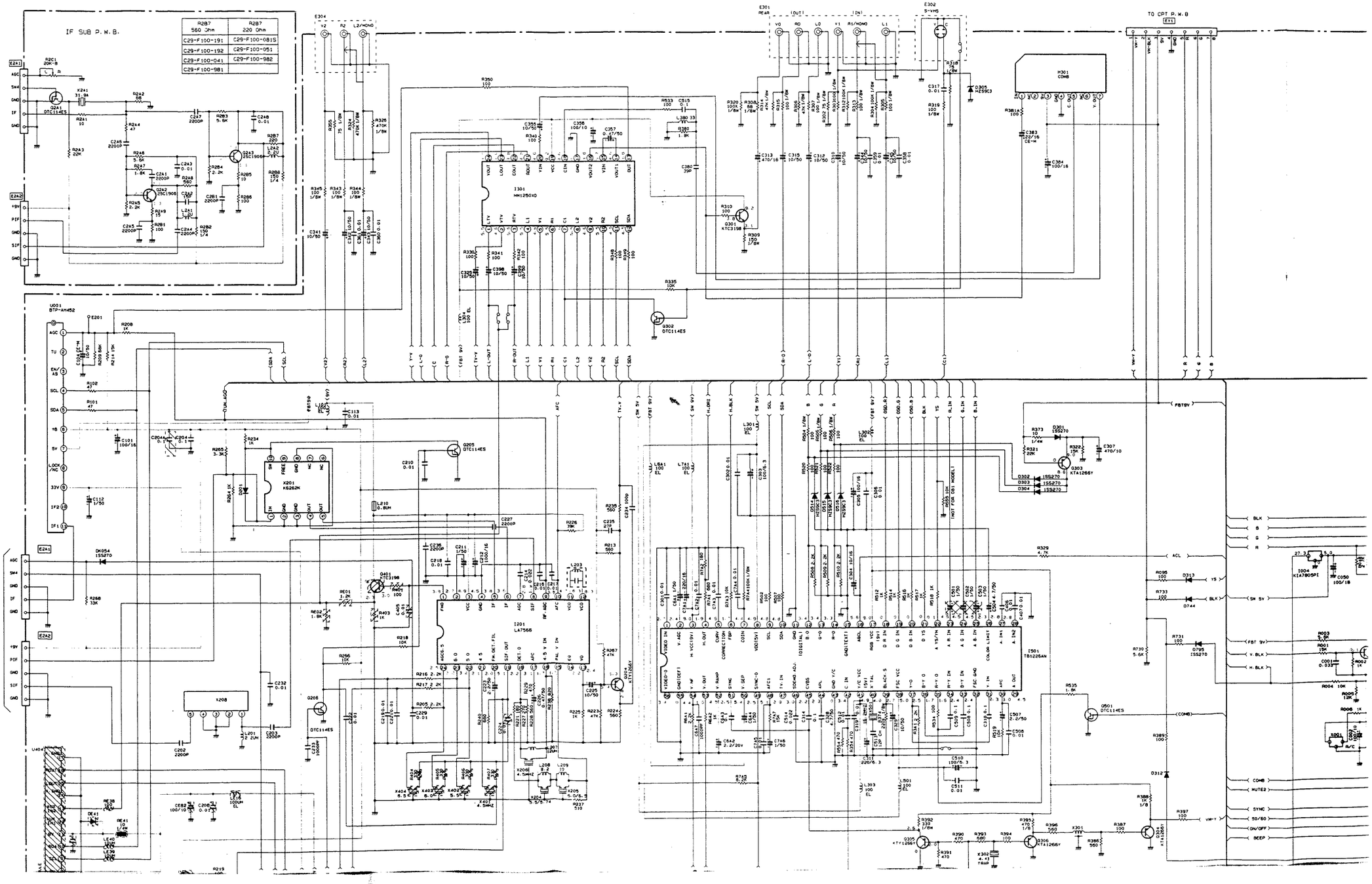
# CIRCUIT DIAGRAMS
# （电路图）

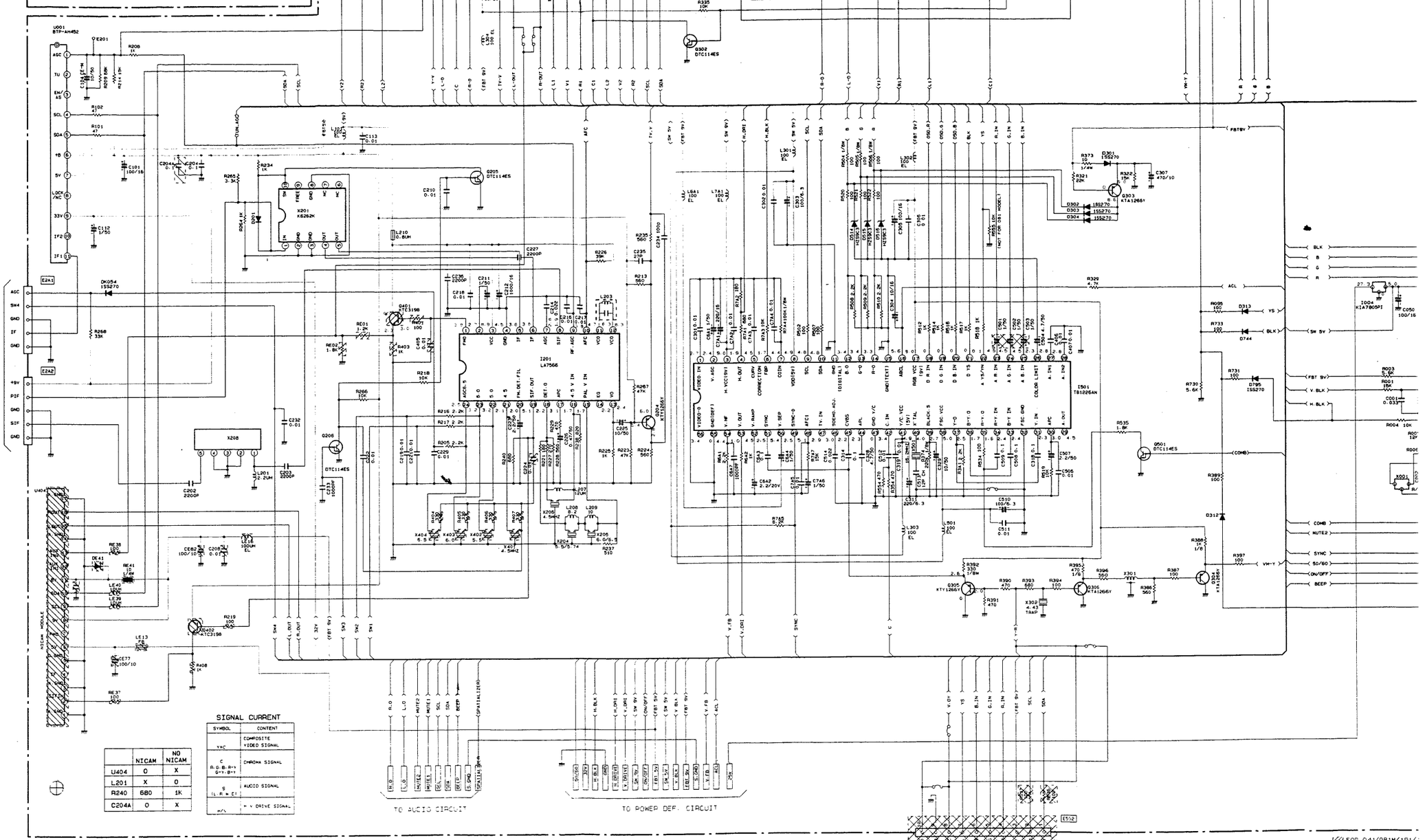
CIRCUIT DIAGRAM : T/TEXT PWB (FOR 081S/PX-981 ONLY)



**PRODUCT SAFETY NO**
replacing any of these cc
safety of the receiver thr

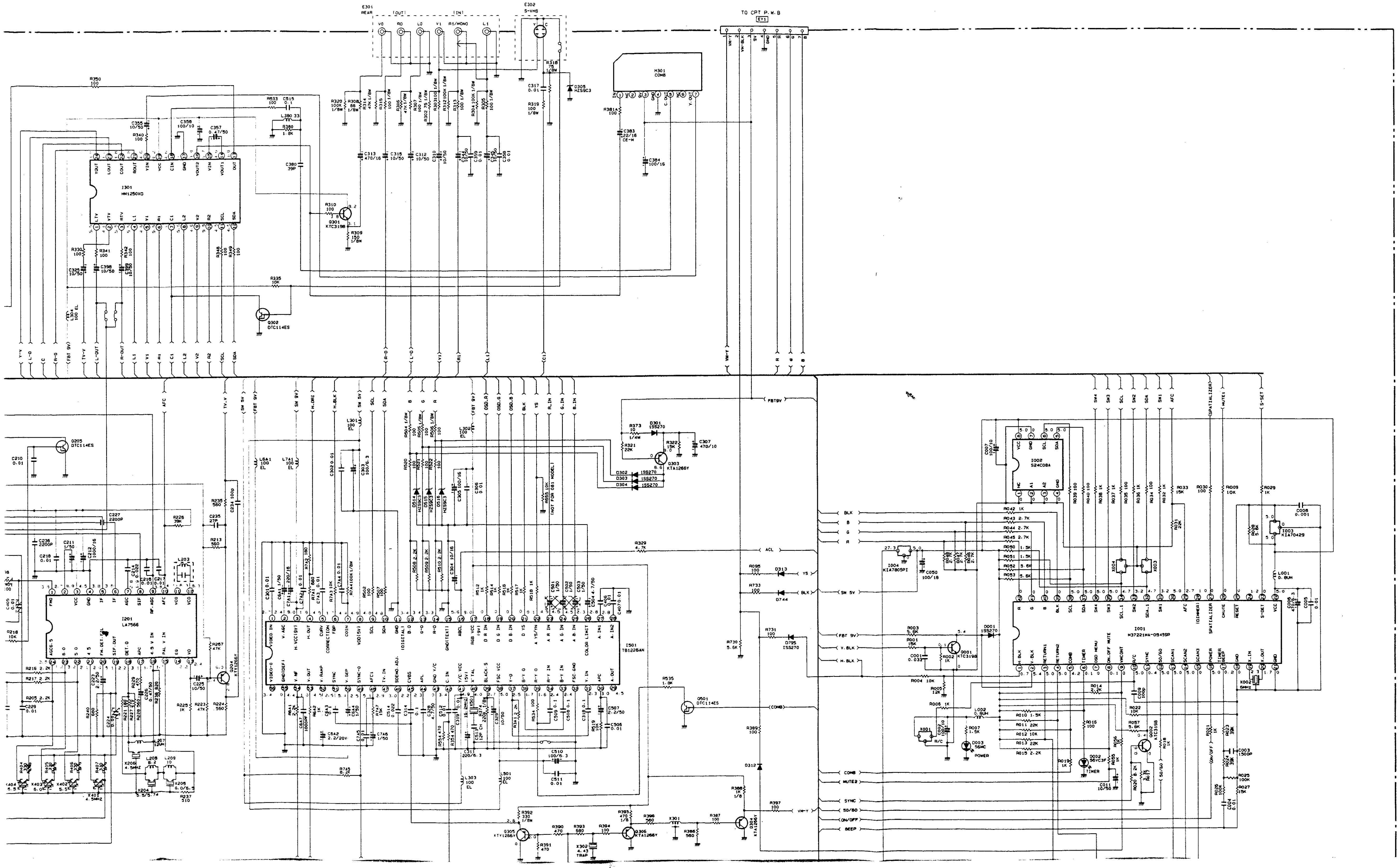
# C29 - F100 CIRCUIT DIAGRAM



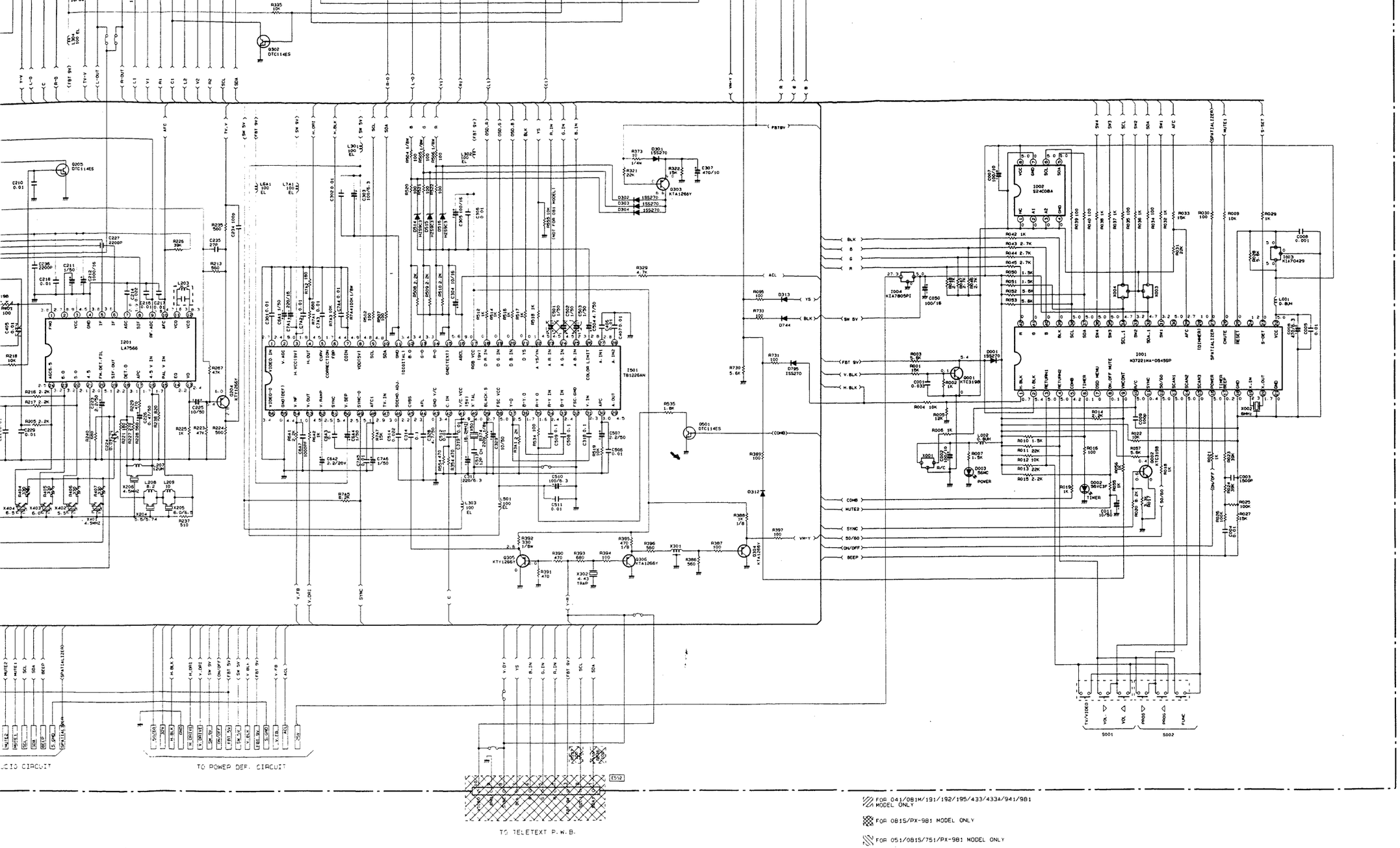

TO IF SUB PWB
AGC
SW4
GND
IF
GND
+9V
PIF
GND
SIF
GND
E2A1
E2A2
U001 BTP-AH452
I201 LA7566
I501 TB1026AN
X201 KS626K
X208
U404
NICAM MODULE
SIGNAL CURRENT
SYMBOL
CONTENT
Y+C
COMPOSITE VIDEO SIGNAL
C R-Y, B-Y G-Y, B-Y
CHROMA SIGNAL
S (L, R or C)
AUDIO SIGNAL
H/L
H. V DRIVE SIGNAL
NICAM
NO NICAM
U404 0 X
L201 X 0
R240 680 1K
C204A 0 X
TO AUDIO CIRCUIT
TO POWER DEF. CIRCUIT
TO TELETEXT P.W.B.
FOR 041/081M/191/:
MODEL ONLY
FOR 0815/PX-981 M:
FOR 051/0815/751/1

**PRODUCT SAFETY NOTE** : Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

# C29 - F100 CIRCUIT DIAGRAM



E301 REAR
(OUT) (IN)
V0 R0 L0 V1 R1/MONO L1
E302 S-VHS
TO CPT P.W.B
EY1
VM-Y VM-BLK 9V GND R G B
M301 COMB
I301 MM1250XD
Q301 KTC3198
Q302 DTC114ES
I201 LA7566
Q204 KTY1266Y
Q205 DTC114ES
I501 TB1226AN
Q303 KTA1266Y
Q501 DTC114ES
Q305 KTY1266Y
Q306 KTA1266Y
Q304 KTA1266Y
X302 4.43 TRAP
I002 S24C08A
I001 M37221MA-0545SP
I003 KIA70429
I004 KIA7805PI
Q001 KTC3198
Q002 KTC3198
D003 56MC POWER
D002 56VC3F TIMER
X002 8MHz
(NOT FOR 081 MODEL)




- Since this is basic circuit diagram, the value of the parts is subject to be altered for improvement
- All DC voltage to be measured with a teser (100k Ω/V).
  Voltage taken on a complex color bar signal including a standard color bar signal.

**PRODUCT SAFETY NOTE** : Components marked with a ⚠ replacing any of these components, read carefully the PROD safety of the receiver through improper servicing.

AUDIO CIRCUIT

POWER CIRCUIT

PH
TO MAIN P.W.B

PDF

DF P.W.B

LIVE

COLD

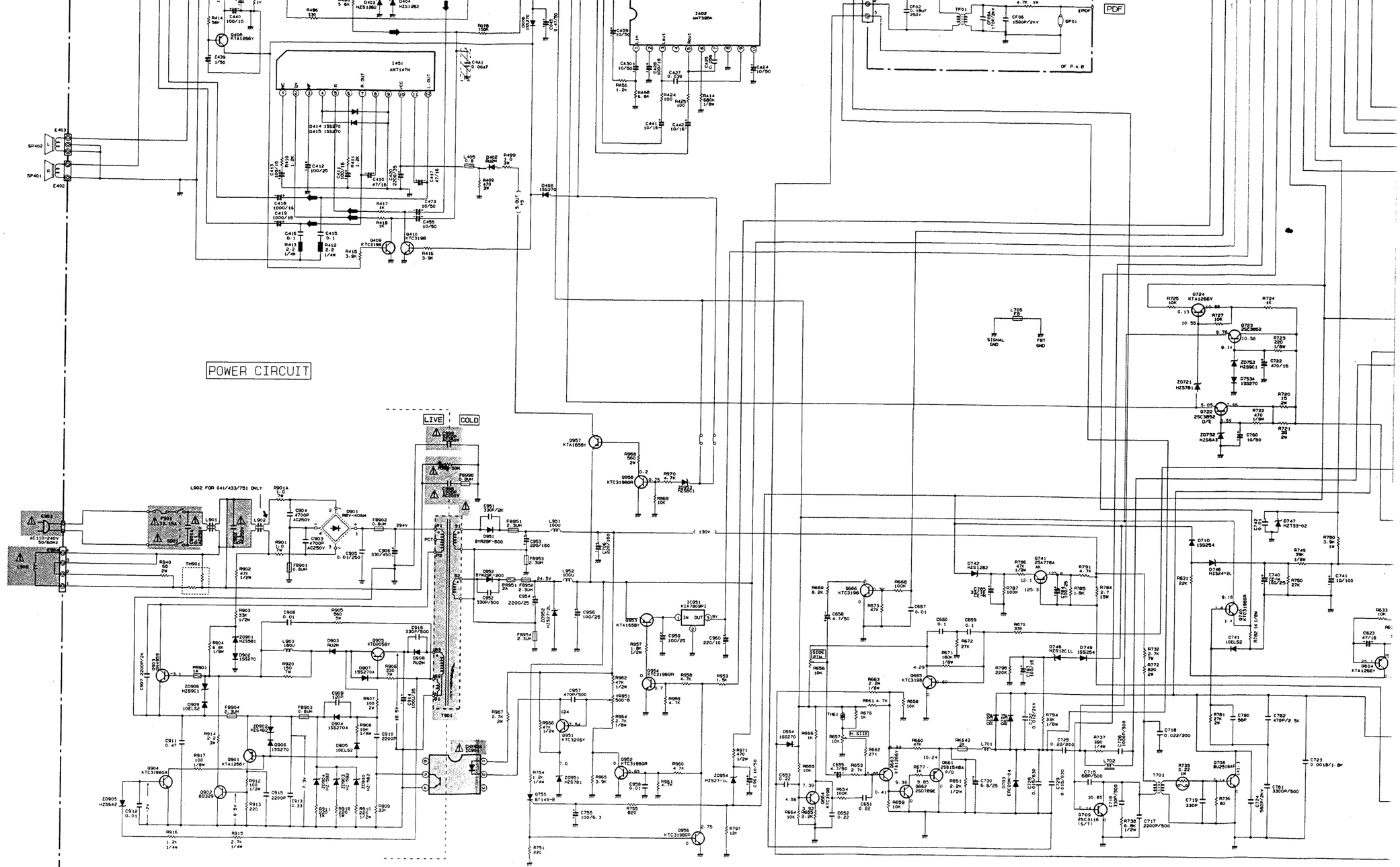
SIGNAL GND

FBT GND

AC110~240V 50/60Hz

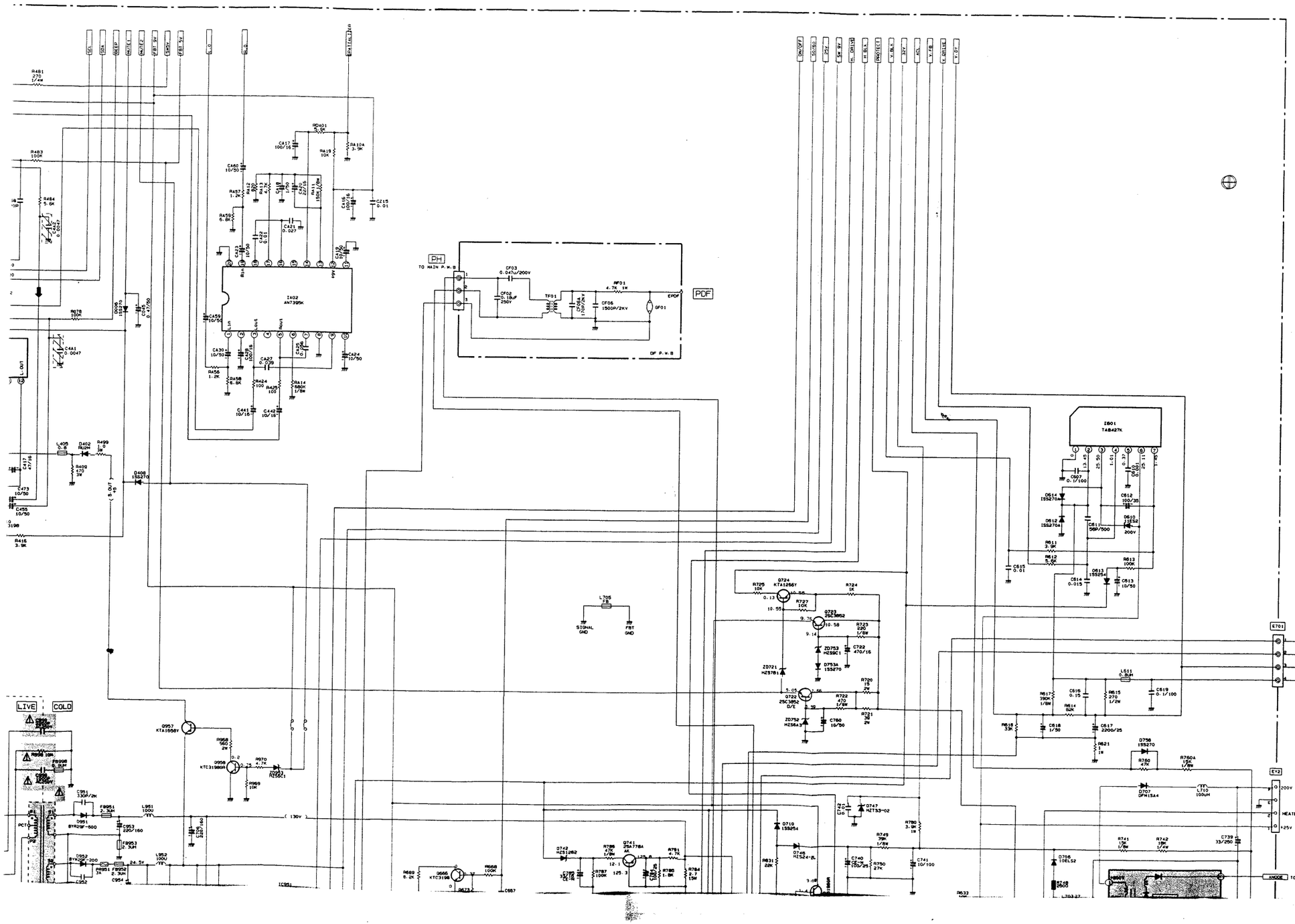
L902 FOR 641/433/751 ONLY

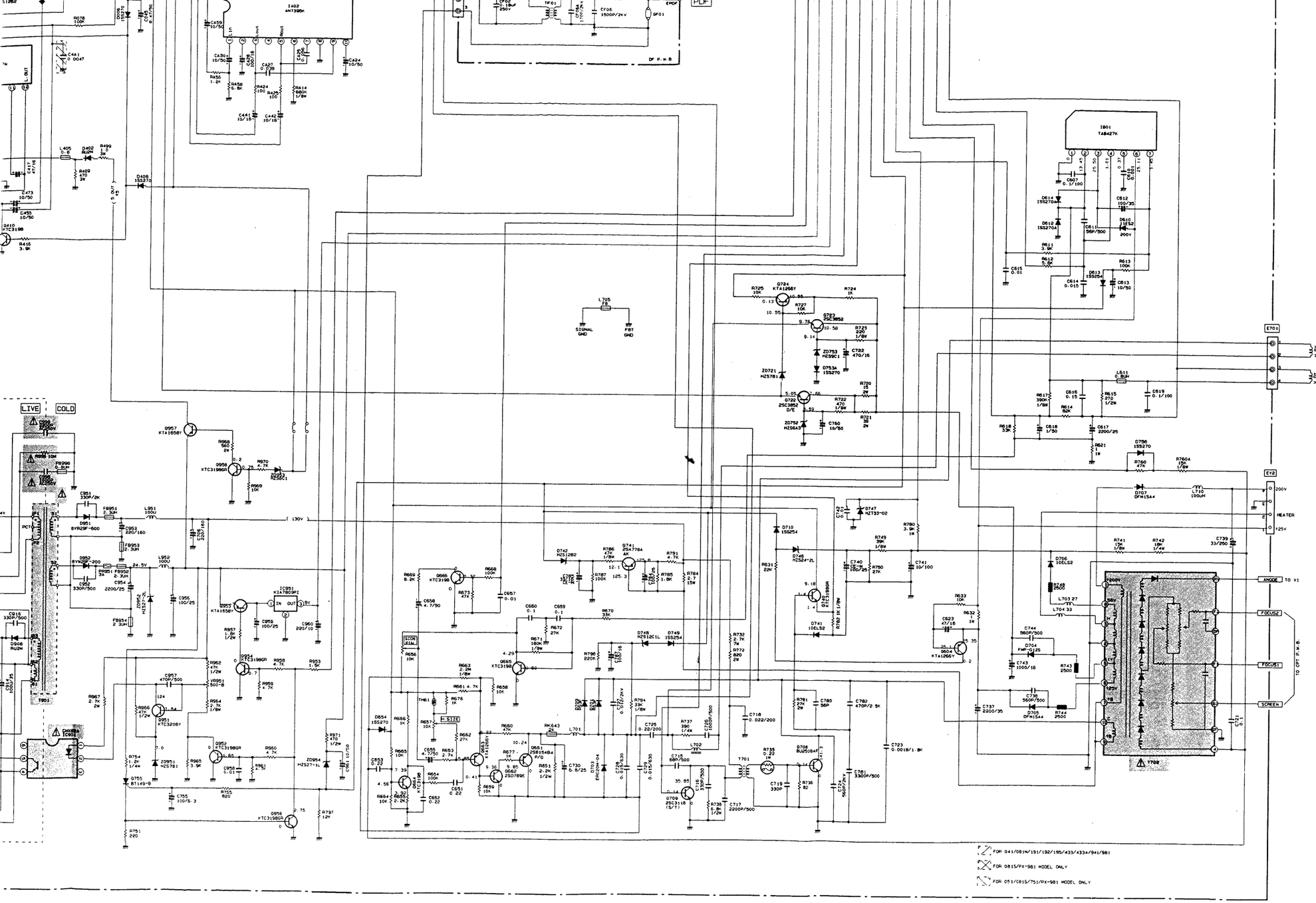
## POWER CIRCUIT




- Since this is basic circuit d
- All DC voltage to be measu
  Voltage taken on a comple

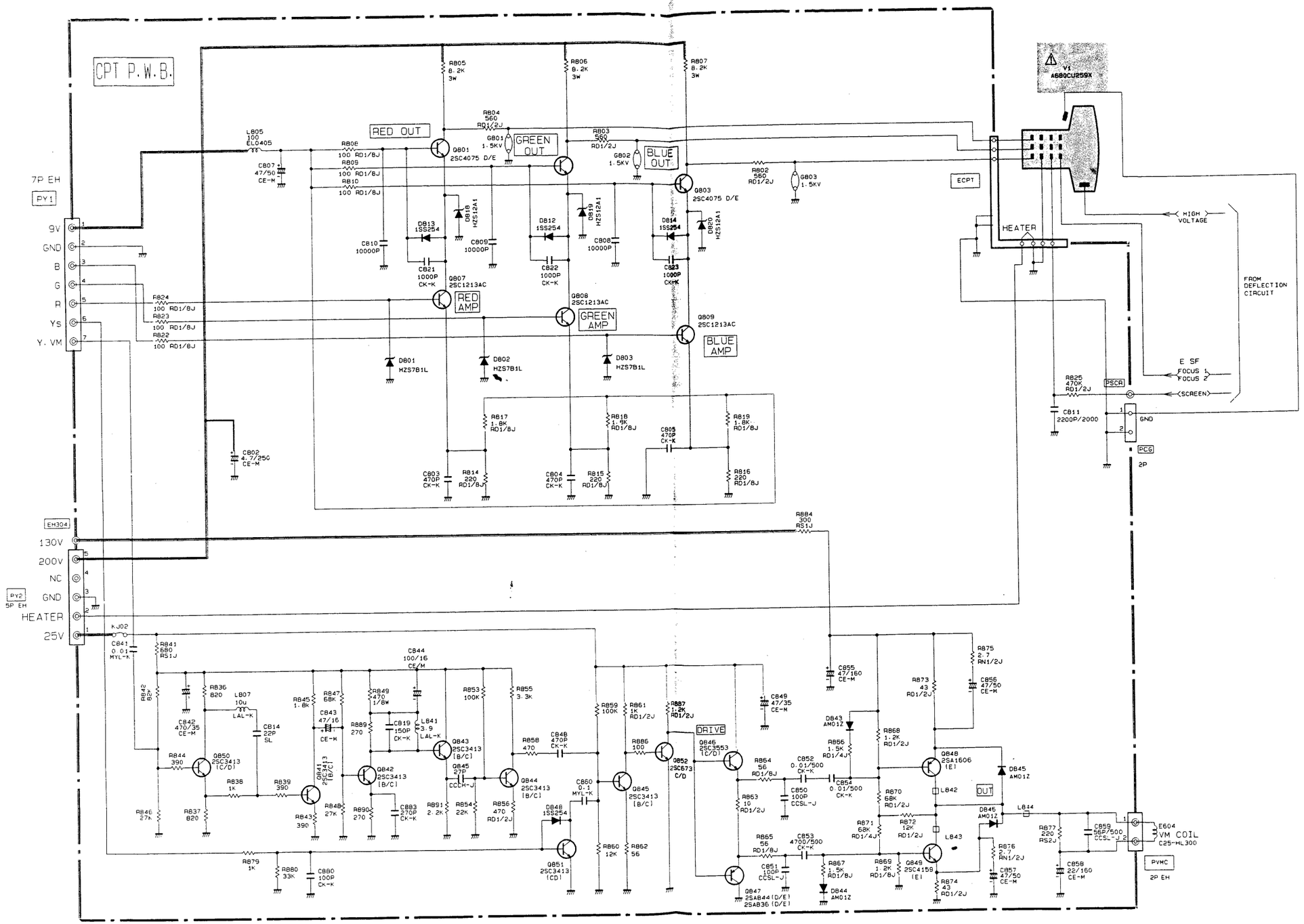
**PRODUCT SAFETY NOTE** : Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.



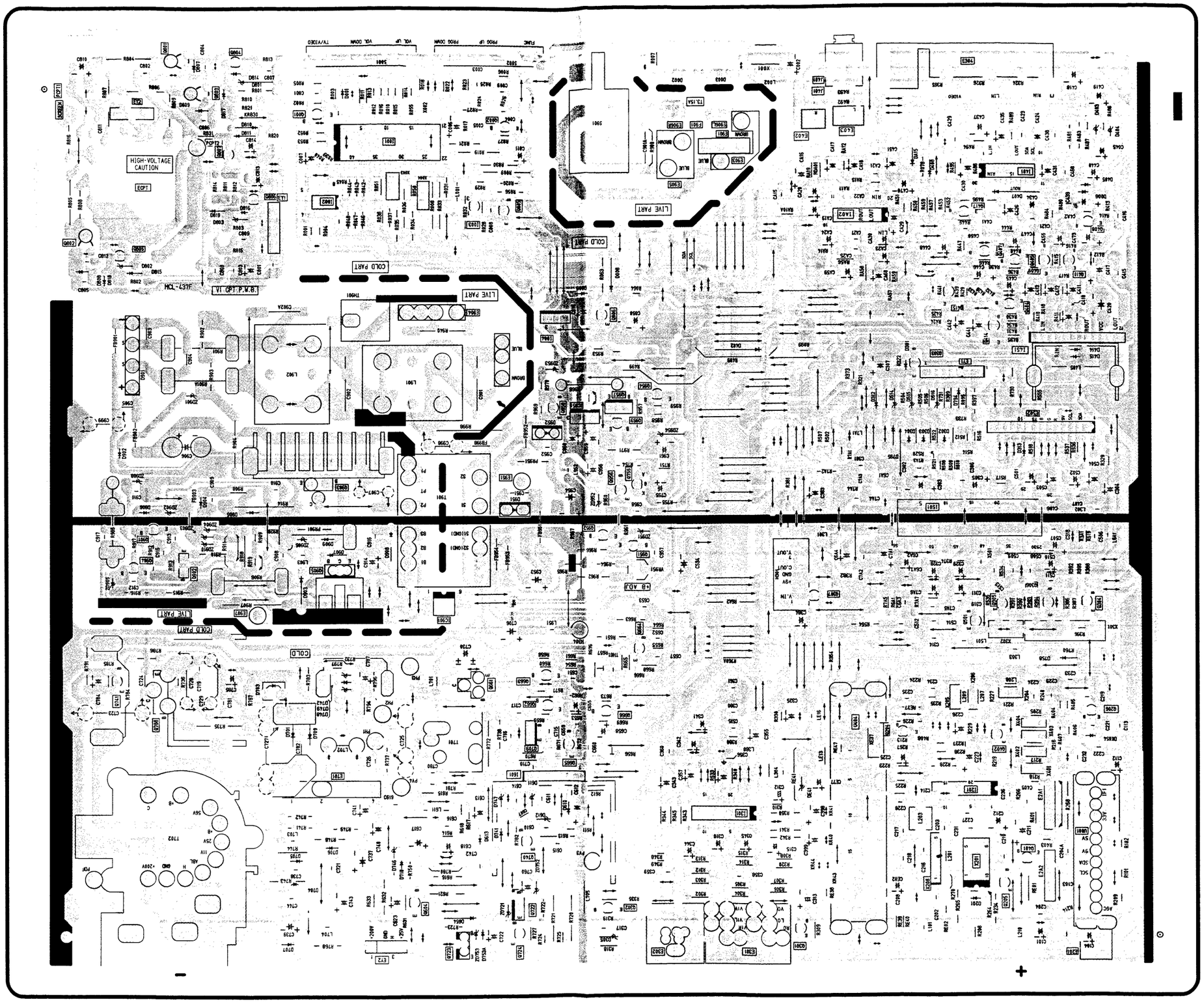



- Since this is basic circuit diagram, the value of the parts is subject to be altered for improvement
- All DC voltage to be measured with a teser (100k Ω/V).
  Voltage taken on a complex color bar signal including a standard color bar signal.

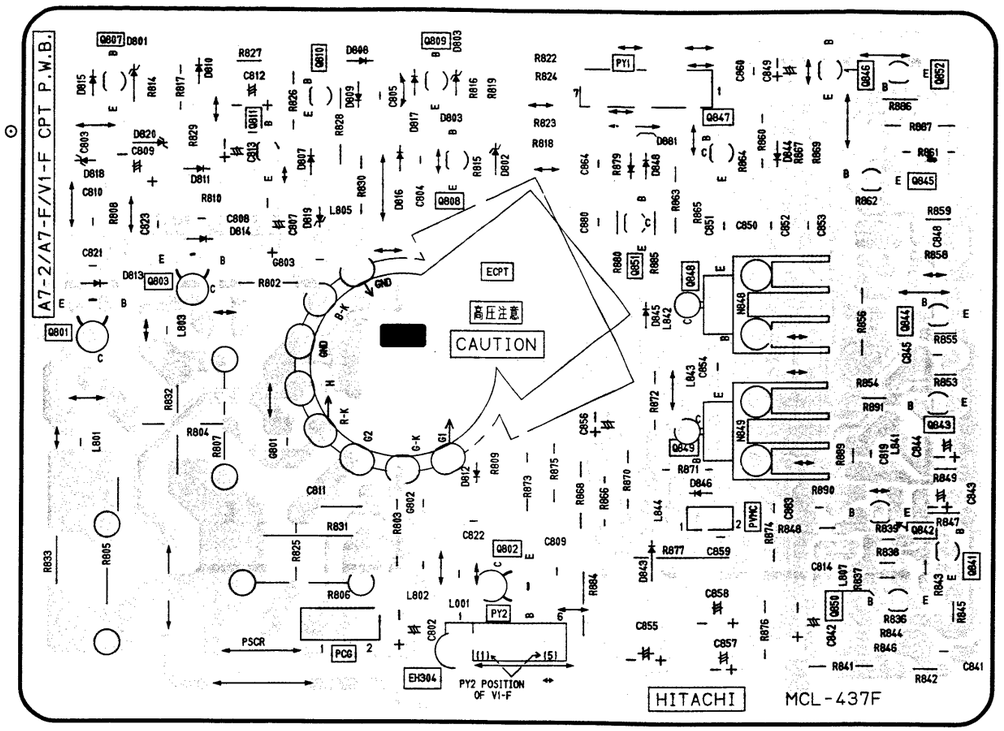
# CIRCUIT DIAGRAME : CRT PWB



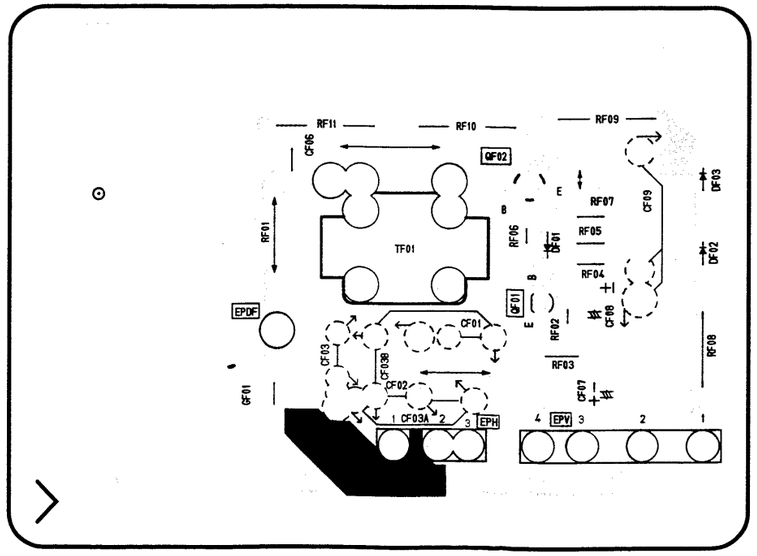
# MAIN P.W.B（主印刷电路板）



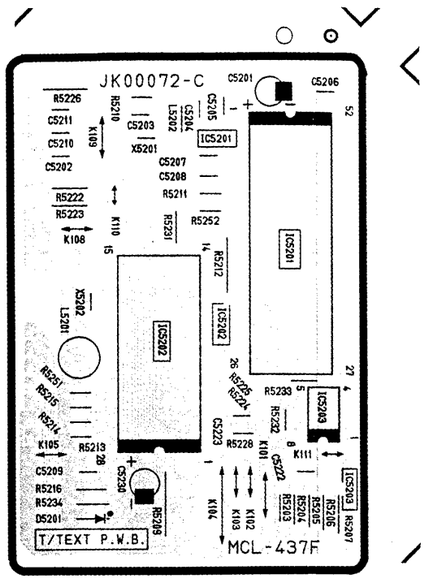
## CRT P.W.B.



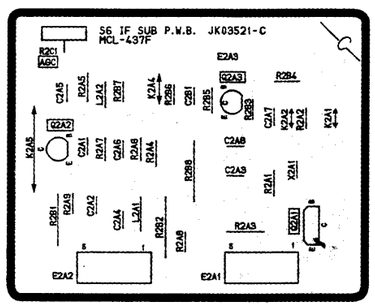

## DYNAMIC FOCUS P.W.B.



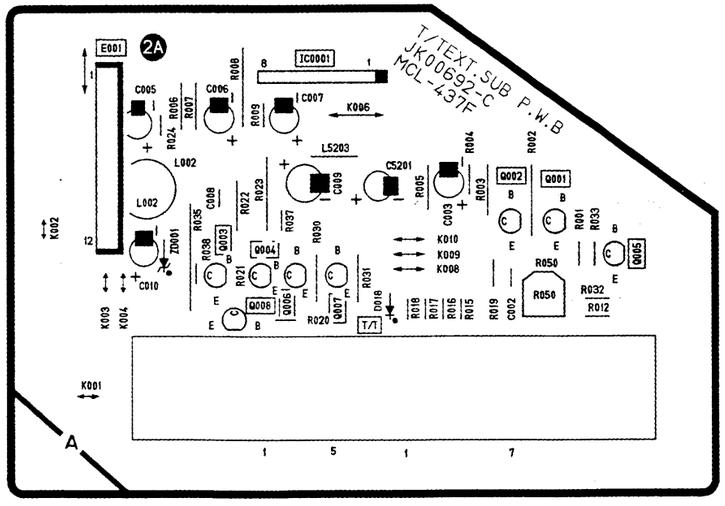
## T/TEXT PWB (081S/982 ONLY)



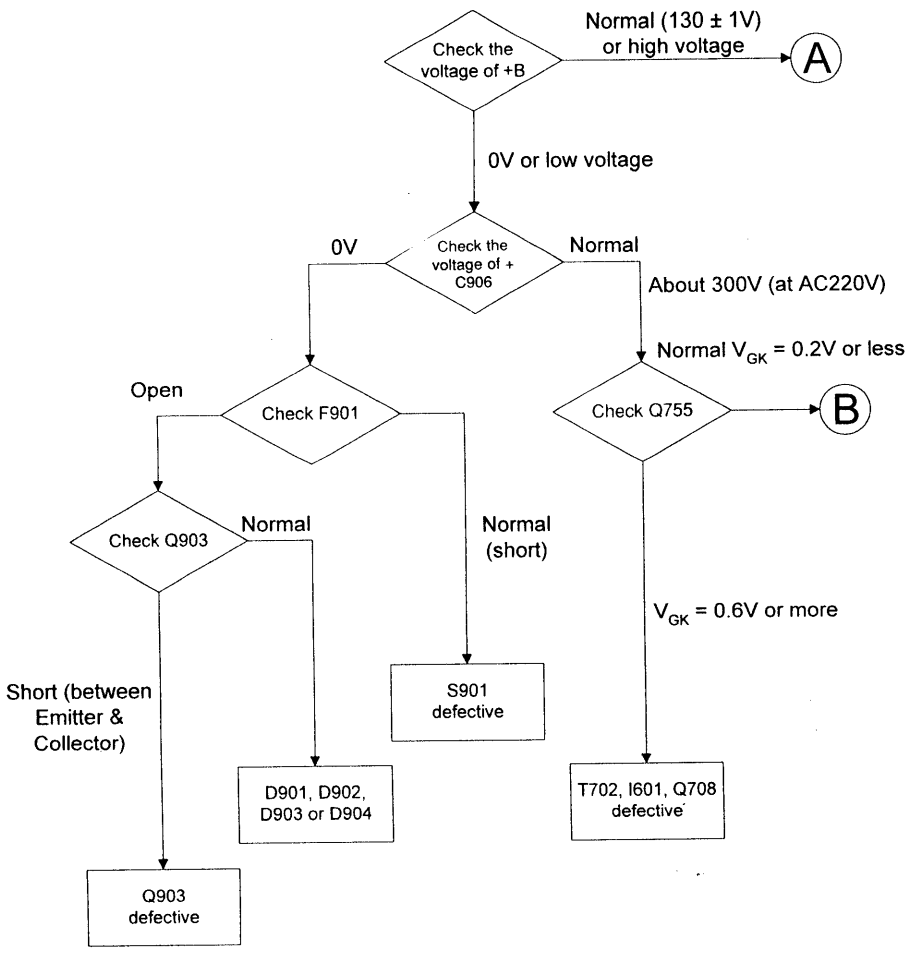

## IF SUB PWB

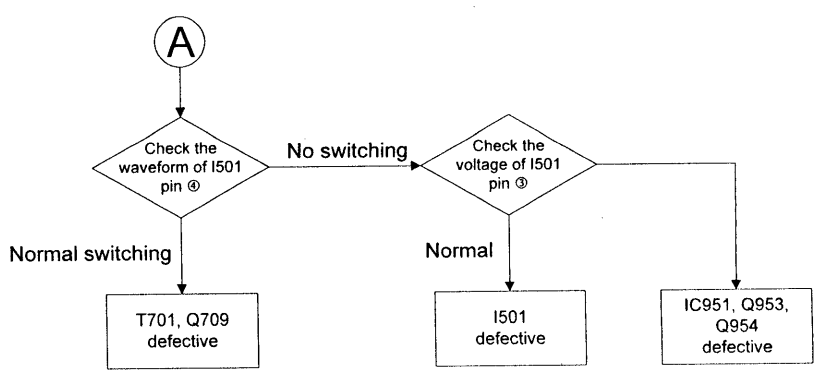


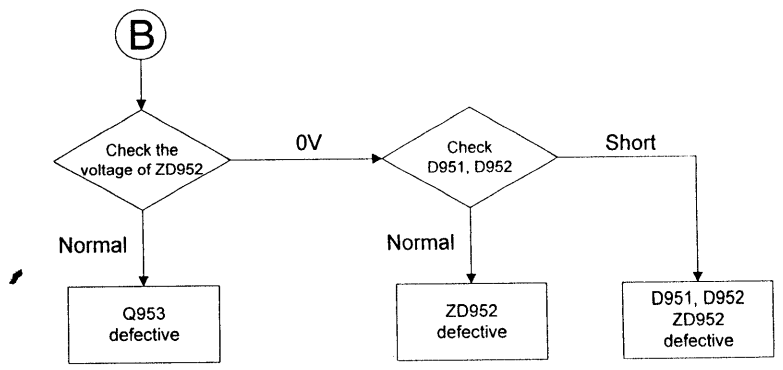

## T/TEXT SUB PWB (081S/982 ONLY)



## ① NO RASTER AND SOUND

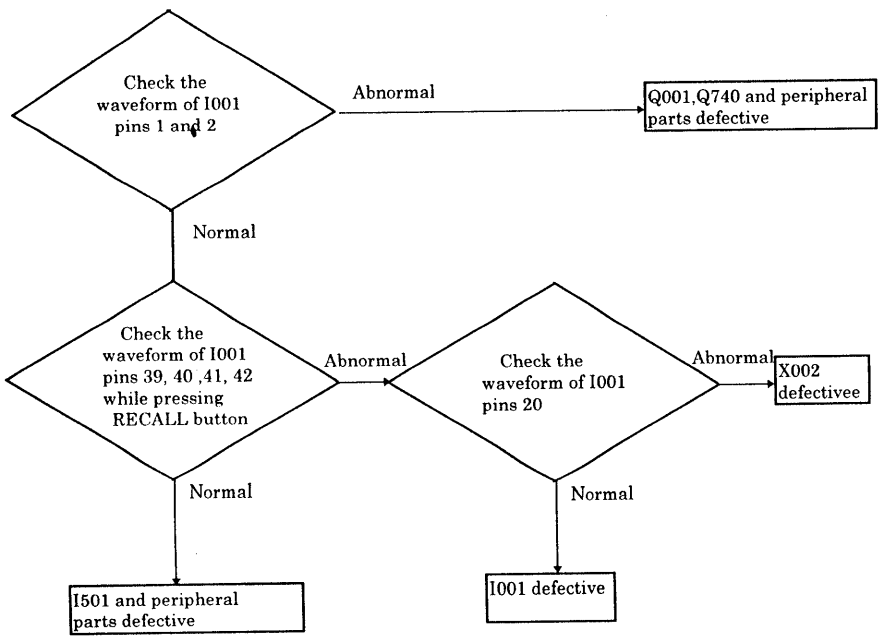


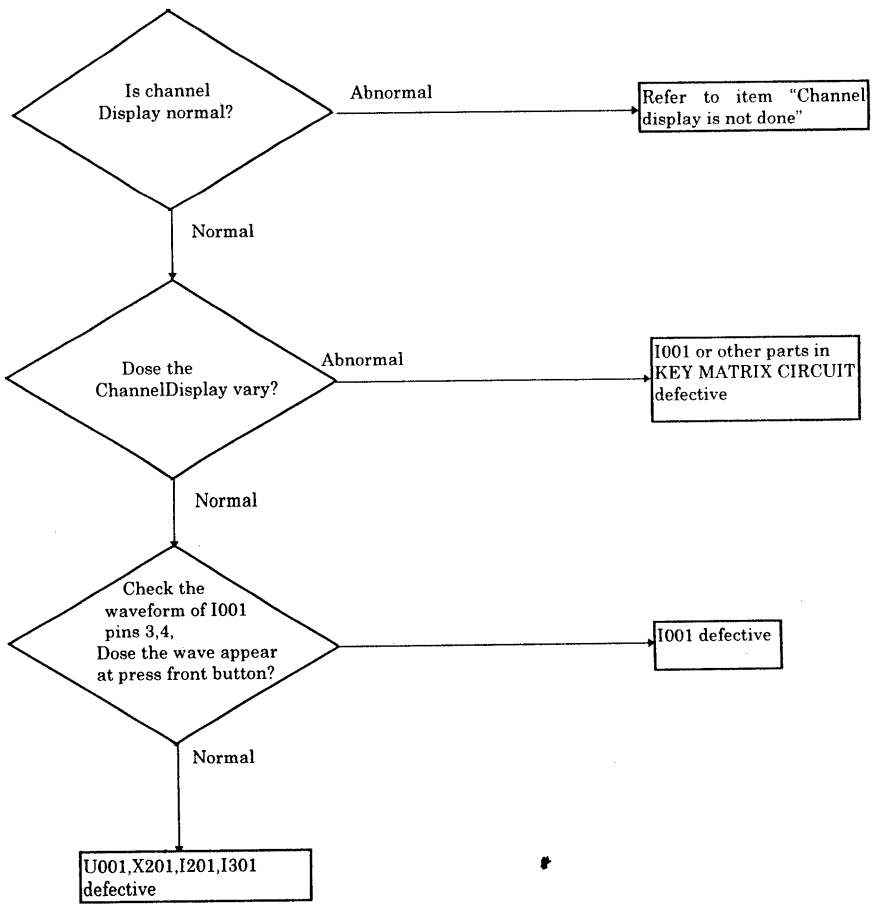





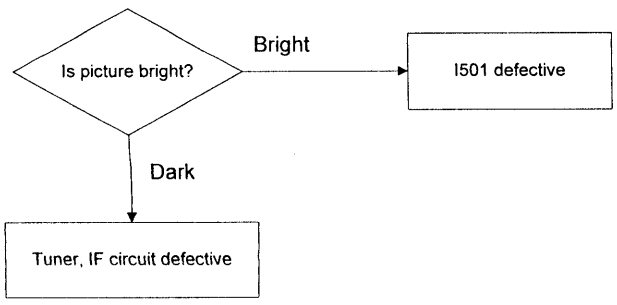

## ② CHANNEL DISPLAY IS NOT DONE



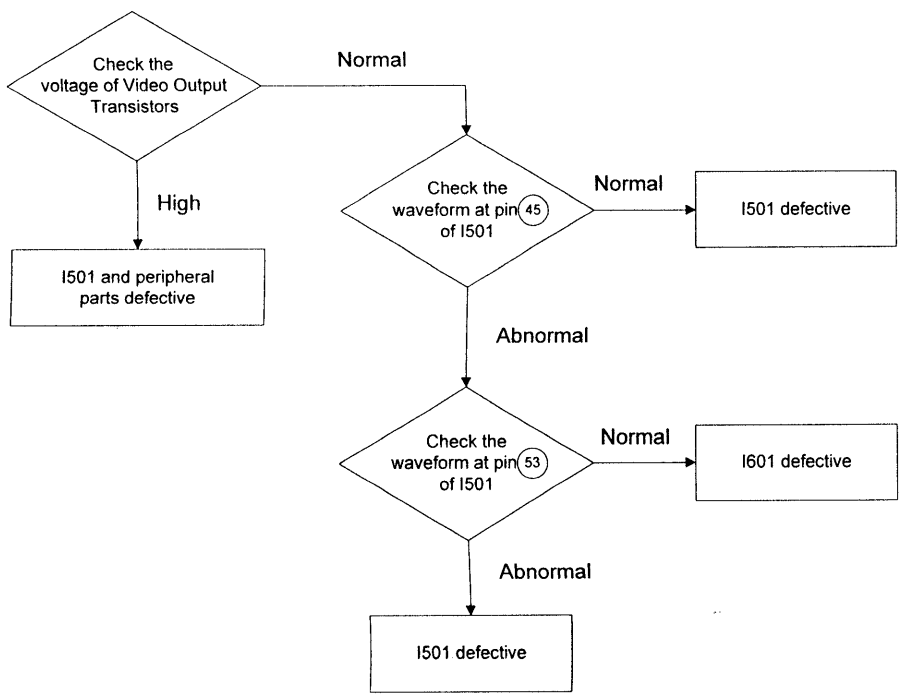

## ③ CHANNEL SELECTION IS NOT DONE


Is channel Display normal?
Abnormal
Refer to item "Channel display is not done"
Normal
Dose the ChannelDisplay vary?
Abnormal
I001 or other parts in KEY MATRIX CIRCUIT defective
Normal
Check the waveform of I001 pins 3,4, Dose the wave appear at press front button?
I001 defective
Normal
U001,X201,I201,I301 defective

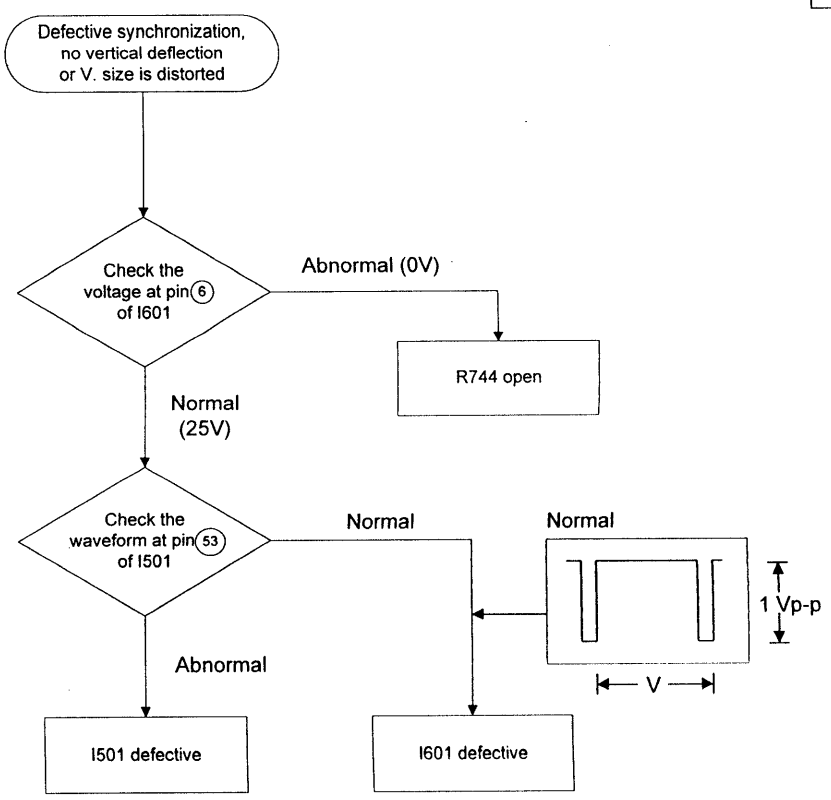
### ④ NO SYNC.



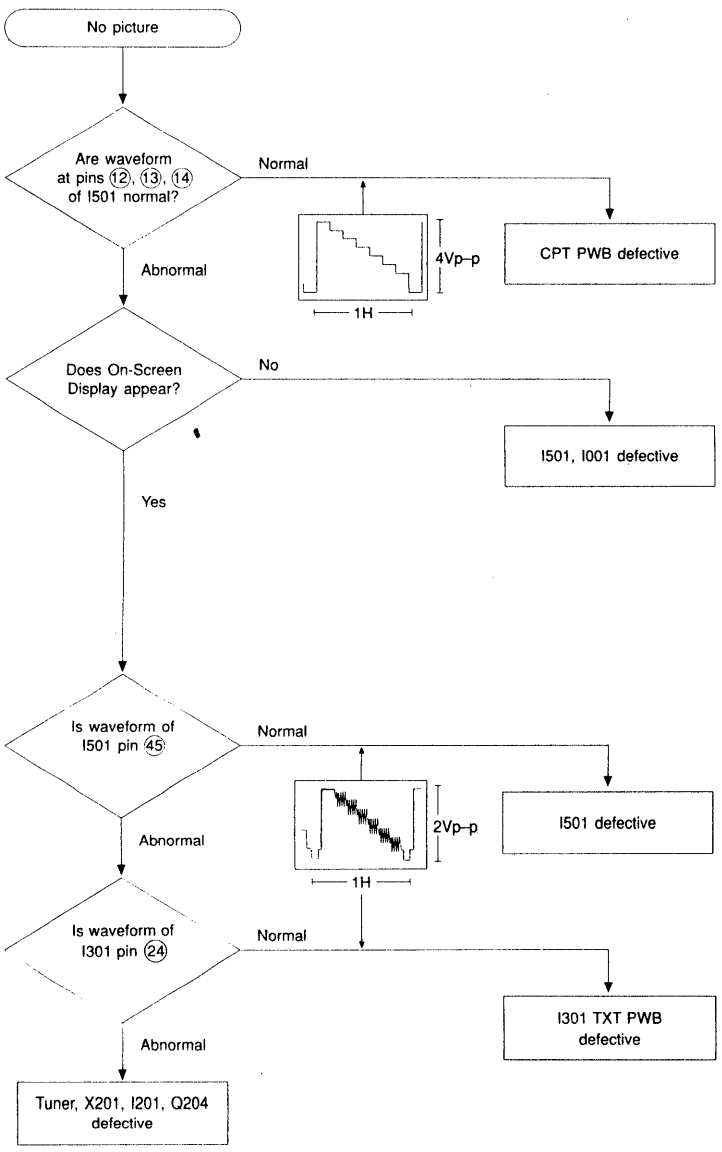

### ⑤ ONLY RASTER OR FLYBACK TRACE APPARENT ON PICTURE



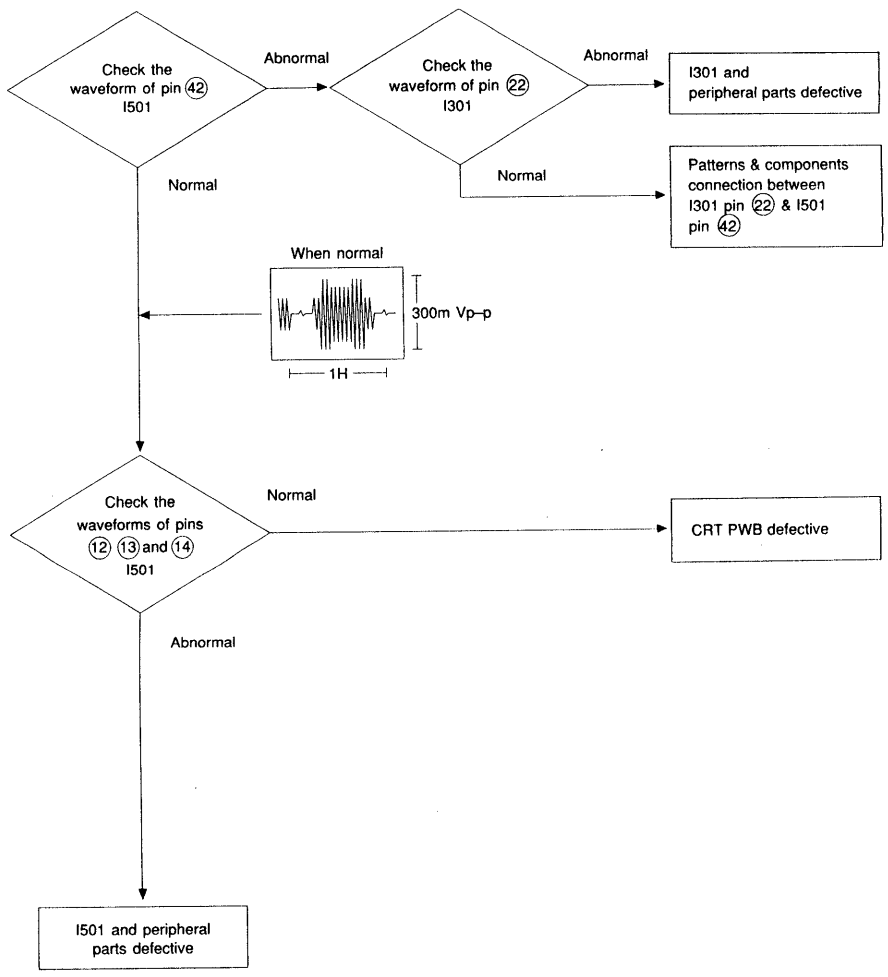

### ⑥ DEFECTIVE SYNCHRONIZATION, NO VERTICAL DEFLECTION OR V. SIZE IS DISTORTED




### ⑦ NO PICTURE




### ⑧ NO COLOR



# REPLACEMENT PARTS LIST

**PRODUCT SAFETY NOTE:** Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

**ABBREVIATIONS** Capacitors.....CD: Ceramic Disk, PF: Polyester Film, EL: Electrolytic, PP: Polypropylene, PR: Paper, TA: Tantalum, TM: Trimer.
Resistors.....CF: Carbon film, WW: Wire Wound, FR: Fuse Resistor, MG: Metal Glazed, VR: Variable Resistor, CC: Carbon Composition, MF: Metal Oxide Film.
Semiconductors....TR: Transistor, DI: Diode, ZD: Zener Diode, VA: Varistor, TH: Thermistor.

| SYMBOL No. | PART No. | DESCRIPTIONS | SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|---|---|---|
| B | JK04241 | IF SUB PWB | C224 | AN00624R | PF 0.01MF +-10% 50V |
| B | JK05311D | CPT/3D-COMB PWB | | | (Not for NICAM/A2 models) |
| B | JK05651B | DYNAMIC FOCUS PWB | C225 | 0800294R | EL 10MF 50V(SMG) |
| B001 | JK04031J | V1 MAIN BOARD | C226 | 0800277R | EL 0.47MF 50V(SMG) |
| C001 | AN00631R | PF 0.33MF +-10% 50V | C227 | 0244105R | CD 2200PF +-10% 50V(B) |
| C002 | 0800048R | EL 100MF 10V(SME) | C229 | 0244171R | CD 10000PF 50V(F) |
| C003 | 0890089R | CC 0.0015MF +-10% 50V(B) | C232 | 0244171R | CD 10000PF 50V(F) |
| C004 | AN00624R | PF 0.01MF +-10% 50V | C233 | 0244171R | CD 10000PF 50V(F) |
| C005 | AN00624R | PF 0.01MF +-10% 50V | C234 | 0890074R | CC 100PF +-5% 50V(SL) |
| C006 | 0800351R | EL 470MF 6.3V(SMG) | C235 | 0890066R | CC 27PF +-5% 50V(SL) |
| C007 | 0800048R | EL 100MF 10V(SME) | C236 | 0244105R | CD 2200PF +-10% 50V(B) |
| C008 | 0890087R | CC 1000PF +-10% 50V(B) | C2A1 | 0244105R | CD 2200PF +-10% 50V(B) |
| C009 | 0890074R | CC 100PF +-5% 50V(SL) | C2A1 | 0244105R | CD 2200PF +-10% 50V(B) |
| C011 | 0800294R | EL 10MF 50V(SMG) | C2A2 | 0890063R | CC 15PF +-5% 50V(SL) |
| C045 | 0800277R | EL 0.47MF 50V(SMG) | C2A2 | 0890063R | CC 15PF +-5% 50V(SL) |
| C050 | 0800326R | EL 100MF 16V(SMG) | C2A3 | 0244171R | CD 10000PF 50V(F) |
| C101 | 0800326R | EL 100MF 16V(SMG) | C2A3 | 0244171R | CD 10000PF 50V(F) |
| C104 | 0800294R | EL 10MF 50V(SMG) | C2A4 | 0244105R | CD 2200PF +-10% 50V(B) |
| C112 | 0800279R | EL 1MF 50V(SMG) | C2A4 | 0244105R | CD 2200PF +-10% 50V(B) |
| C113 | 0244171R | CD 10000PF 50V(F) | C2A5 | 0244105R | CD 2200PF +-10% 50V(B) |
| C202 | 0244105R | CD 2200PF +-10% 50V(B) | C2A5 | 0244105R | CD 2200PF +-10% 50V(B) |
| C203 | 0244105R | CD 2200PF +-10% 50V(B) | C2A6 | 0244105R | CD 2200PF +-10% 50V(B) |
| C204 | AN00637R | PF 0.1MF +-10% 50V | C2A6 | 0244105R | CD 2200PF +-10% 50V(B) |
| C204A | 0880057R | PF 0.1MF +-10% 50V | C2A7 | 0244105R | CD 2200PF +-10% 50V(B) |
| | | (For Nicam/A2 models only) | C2A7 | 0244105R | CD 2200PF +-10% 50V(B) |
| C208 | AN00624R | PF 0.01MF +-10% 50V | C2A8 | 0244171R | CD 10000PF 50V(F) |
| | | (For Nicam/A2 models only) | C2A8 | 0244171R | CD 10000PF 50V(F) |
| C210 | 0244171R | CD 10000PF 50V(F) | C2B1 | 0244105R | CD 2200PF +-10% 50V(B) |
| C211 | 0800279R | EL 1MF 50V(SMG) | C2B1 | 0244105R | CD 2200PF +-10% 50V(B) |
| C212 | 0800361F | EL 1000MF 16V(SMG) | C301 | 0244171R | CD 10000PF 50V(F) |
| C214 | AN00628R | PF 0.022MF +-10% 50V | C302 | 0244171R | CD 10000PF 50V(F) |
| C216 | AN00624R | PF 0.01MF +-10% 50V | C303 | 0800047R | EL 100MF 6.3V(SME) |
| C217 | AN00624R | PF 0.01MF +-10% 50V | C304 | 0800015R | EL 10MF 16V(SME) |
| C218 | 0244171R | CD 10000PF 50V(F) | C305 | 0800326R | EL 100MF 16V(SMG) |
| C219 | 0244171R | CD 10000PF 50V(F) | C306 | 0244171R | CD 10000PF 50V(F) |
| C221 | 0244171R | CD 10000PF 50V(F) | C307 | 0800352R | EL 470MF 10V(SMG) |
| C222 | 0244171R | CD 10000PF 50V(F) | C310 | 0800294R | EL 10MF 50V(SMG) |
| C223 | 0800282R | EL 2.2MF 50V(SMG) | C311 | 0800333R | EL 220MF 6.3V(SMG) |

C29-F100

**制品安全上的注意**：在下表附带⚠标记的机件具备特别的安全特性。要替换这些机件以前请详细阅读这检修手册中“制品安全上的注意：一书，以避免因检修不当而降低电视机的安全性。

**PRODUCT SAFETY NOTE:** Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| C312 | 0800294R | EL 10MF 50V(SMG) |
| C313 | 0800353R | EL 470MF 16V(SMG) |
| C314 | AN00637R | PF 0.1MF +-10% 50V |
| C315 | 0800294R | EL 10MF 50V(SMG) |
| C317 | 0244171R | CD 10000PF 50V(F) |
| C318 | AN00637R | PF 0.1MF +-10% 50V |
| C319 | 0244171R | CD 10000PF 50V(F) |
| C325 | 0800294R | EL 10MF 50V(SMG) |
| C328 | 0800288R | EL 4.7MF 50V(SMG) |
| C329 | 0800294R | EL 10MF 50V(SMG) |
| C341 | 0800294R | EL 10MF 50V(SMG) |
| C342 | 0800294R | EL 10MF 50V(SMG) |
| C343 | 0800294R | EL 10MF 50V(SMG) |
| C344 | 0800294R | EL 10MF 50V(SMG) |
| C345 | 0800294R | EL 10MF 50V(SMG) |
| C355 | 0800294R | EL 10MF 50V(SMG) |
| C356 | 0800048R | EL 100MF 10V(SME) |
| C357 | 0800277R | EL 0.47MF 50V(SMG) |
| C358 | 0244171R | CD 10000PF 50V(F) |
| C359 | 0244171R | CD 10000PF 50V(F) |
| C360 | 0244171R | CD 10000PF 50V(F) |
| C361 | 0244171R | CD 10000PF 50V(F) |
| C380 | 0890068R | CC 39PF +-5% 50V(SL) |
| C383 | 0800299R | EL 22MF 16V(SMG) |
| C384 | 0800326R | EL 100MF 16V(SMG) |
| C398 | 0800294R | EL 10MF 50V(SMG) |
| C399 | 0800294R | EL 10MF 50V(SMG) |
| C405 | AN00624R | PF 0.01MF +-10% 50V (Not for NICAM/A2 models) |
| C406 | 0244171R | CD 10000PF 50V(F) |
| C407 | 0244171R | CD 10000PF 50V(F) |
| C410 | 0800317R | EL 47MF 16V(SMG) |
| C411 | 0800326R | EL 100MF 16V(SMG) |
| C412 | 0800327R | EL 100MF 25V(SMG) |
| C413 | 0800326R | EL 100MF 16V(SMG) |
| C415 | AN00637R | PF 0.1MF +-10% 50V |
| C416 | AN00637R | PF 0.1MF +-10% 50V |
| C417 | 0800317R | EL 47MF 16V(SMG) |
| C418 | 0800361N | EL 1000MF 16V(SMG) |
| C419 | 0800361N | EL 1000MF 16V(SMG) |
| C420 | 0255011F | EL 2200MF 35V(KME) |
| C421 | AN00624R | PF 0.01MF +-10% 50V |
| C423 | AN00624R | PF 0.01MF +-10% 50V |
| C424 | 0284623R | EL 1MF 50V(BP) |
| C426 | 0284638R | EL 10MF 16V(BP) |
| C429 | 0880045R | PF 0.012MF +-10% 50V |
| C430 | 0800352R | EL 470MF 10V(SMG) |
| C431 | 0800326R | EL 100MF 16V(SMG) |
| C434 | 0284623R | EL 1MF 50V(BP) |
| C435 | 0284638R | EL 10MF 16V(BP) |
| C437 | 0800353R | EL 470MF 16V(SMG) |
| C438 | 0880045R | PF 0.012MF +-10% 50V |
| C439 | 0800279R | EL 1MF 50V(SMG) |
| C440 | 0800048R | EL 100MF 10V(SME) |
| C455 | 0800294R | EL 10MF 50V(SMG) |
| C468 | 0890087R | CC 1000PF +-10% 50V(B) |
| C473 | 0800294R | EL 10MF 50V(SMG) |
| C4A1 | AN00619R | PF 0.0047MF 50V |
| C4A2 | AN00619R | PF 0.0047MF 50V |
| C501 | 0800279R | EL 1MF 50V(SMG) (For T/text models only) |
| C502 | 0800279R | EL 1MF 50V(SMG) (For T/text models only) |
| C503 | 0800279R | EL 1MF 50V(SMG) (For T/text models only) |
| C504 | 0800288R | EL 4.7MF 50V(SMG) |
| C506 | AN00624R | PF 0.01MF +-10% 50V |
| C507 | 0800282R | EL 2.2MF 50V(SMG) |
| C508 | AN00637R | PF 0.1MF +-10% 50V |
| C509 | AN00637R | PF 0.1MF +-10% 50V |
| C510 | 0800047R | EL 100MF 6.3V(SME) |
| C511 | 0244171R | CD 10000PF 50V(F) |
| C512 | AN00624R | PF 0.01MF +-10% 50V |
| C513 | 0246442R | CD 12PF +-5% 50V(CH) |
| C514 | AN00628R | PF 0.022MF +-10% 50V |
| C515 | AN00637R | PF 0.1MF +-10% 50V |
| C534 | 0800087F | EL 2200MF 16V(SME) |
| C607 | 0279693R | PF 0.1M +-10% 100V |
| C610 | 0890087R | CC 1000PF +-10% 50V(B) |
| C611 | 0247848R | CD 56PF +-5% 500V(SL) |
| C611 | 0247848R | CD 56PF +-5% 500V(SL) |
| C612 | 0800052R | EL 100MF 35V(SME) |
| C613 | 0800294R | EL 10MF 50V(SMG) |
| C614 | AN00626R | PF 0.015MF +-10% 50V |
| C615 | AN00624R | PF 0.01MF +-10% 50V |
| C616 | 0880017R | PF 0.15MF +-10% 50V |
| C617 | 0800368F | EL 2200MF 25V(SMG) |
| C618 | 0800003R | EL 1MF 50V(SME) |
| C619 | 0279693R | PF 0.1M +-10% 100V |
| C623 | 0800317R | EL 47MF 16V(SMG) |

| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| C651 | 0880018R | PF 0.22MF +-10% 50V |
| C652 | 0880018R | PF 0.22MF +-10% 50V |
| C653 | 0880018R | PF 0.22MF +-10% 50V |
| C655 | 0800288R | EL 4.7MF 50V(SMG) |
| C657 | AN00624R | PF 0.01MF +-10% 50V |
| C658 | 0800288R | EL 4.7MF 50V(SMG) |
| C659 | AN00637R | PF 0.1MF +-10% 50V |
| C660 | AN00637R | PF 0.1MF +-10% 50V |
| C6A1 | 0800279R | EL 1MF 50V(SMG) |
| C6A2 | 0292718F | TA 2.2MF 20V |
| C6A3 | AN00637R | PF 0.1MF +-10% 50V |
| C6A4 | 0800279R | EL 1MF 50V(SMG) |
| C6A7 | 0890087R | CC 1000PF +-10% 50V(B) |
| C706 | 0253862F | EL 220MF 160V |
| C715 | 0247850R | CD 68PF +-5% 500V(SL) |
| C716 | 0243507R | CD 330PF +-10% 500V(B) |
| C717 | 0244505R | CD 2200PF +-10% 500V(B) |
| C718 | 0299918F | PF 0.022MF +-10% 200V |
| C719 | 0890081R | CC 330PF +-10% 50V(B) |
| C721 | AN00637R | PF 0.1MF +-10% 50V |
| C722 | 0800353R | EL 470MF 16V(SMG) |
| C723 | 0262407F | PF 0.0018MF 1.8KV |
| C724 | 0244722 | CD 560PF +-10% 2KV(B) |
| C725 | 0299930F | PF 0.22MF +-10% 200V |
| C726 | 0244501R | CD 1000PF +-10% 500V(B) |
| C727 | AN01069F | PF 0.012MF 2KV |
| C728 | 0299720F | PF 0.015MF 630V |
| C729 | 0299720F | PF 0.015MF 630V |
| C730 | 0259474 | EL 68MF 25V(BP) |
| C737 | 0284442 | EL 2200MF 35V |
| C738 | 0243510R | CD 560PF +-10% 500V(B) |
| C739 | 0253974F | EL 33MF 250V |
| C740 | 0800327R | EL 100MF 25V(SMG) |
| C741 | 0800021R | EL 10MF 100V(SME) |
| C742 | AN00624R | PF 0.01MF +-10% 50V |
| C743 | 0800361F | EL 1000MF 16V(SMG) |
| C744 | 0243510R | CD 560PF +-10% 500V(B) |
| C755 | 0800047R | EL 100MF 6.3V(SME) |
| C760 | 0800294R | EL 10MF 50V(SMG) |
| C780 | 0890071R | CC 56PF +-5% 50V(SL) |
| C781 | 0244507R | CD 3300PF +-10% 500V(B) |
| C782 | 0244202F | CD 470PF +-10% 2KV(R) |
| C784 | 0800327R | EL 100MF 25V(SMG) |
| C785 | 0800308R | EL 33MF 16V(SMG) |
| C787 | 0800326R | EL 100MF 16V(SMG) |
| C7A1 | 0800058R | EL 220MF 16V(SME) |
| C7A2 | 0244171R | CD 10000PF 50V(F) |
| C7A3 | AN00624R | PF 0.01MF +-10% 50V |
| C7A4 | AN00624R | PF 0.01MF +-10% 50V |
| C7A5 | AN00624R | PF 0.01MF +-10% 50V |
| C7A6 | 0800279R | EL 1MF 50V(SMG) |
| C802 | AL00027R | EL 4.7MF 250V |
| C803 | 0890083R | CC 470PF +-10% 50V(B) |
| C804 | 0890083R | CC 470PF +-10% 50V(B) |
| C805 | 0890083R | CC 470PF +-10% 50V(B) |
| C807 | 0800321R | EL 47MF 50V(SMG) |
| C808 | 0244171R | CD 10000PF 50V(F) |
| C809 | 0244171R | CD 10000PF 50V(F) |
| C810 | 0244171R | CD 10000PF 50V(F) |
| C811 | AJ00559 | CC 2200PF+-10% 2KV |
| C814 | 0890065R | CC 22PF +-5% 50V(SL) |
| C819 | 0890076R | CC 150PF +-10% 50V(B) |
| C821 | 0890087R | CC 1000PF +-10% 50V(B) |
| C822 | 0890087R | CC 1000PF +-10% 50V(B) |
| C823 | 0890087R | CC 1000PF +-10% 50V(B) |
| C841 | 0880044R | PF 0.01MF +-10% 50V |
| C842 | 0800076F | EL 470MF 35V(SME) |
| C843 | 0800317R | EL 47MF 16V(SMG) |
| C844 | 0800326R | EL 100MF 16V(SMG) |
| C845 | 0890119R | CC 27PF +-5% 50V(CH) |
| C848 | 0890083R | CC 470PF +-10% 50V(B) |
| C849 | 0800319R | EL 47MF 35V(SMG) |
| C850 | 0890074R | CC 100PF +-5% 50V(SL) |
| C851 | 0890074R | CC 100PF +-5% 50V(SL) |
| C852 | AJ00001R | CC 0.01MF +80%-20% 500V |
| C853 | 0244509R | CD 4700PF +-10% 500V(B) |
| C854 | AJ00001R | CC 0.01MF +80%-20% 500V |
| C855 | 0253959F | EL 47MF 160V |
| C856 | 0800321R | EL 47MF 50V(SMG) |
| C857 | 0800321R | EL 47MF 50V(SMG) |
| C858 | 0253957F | EL 22MF 160V |
| C859 | 0247848R | CD 56PF +-5% 500V(SL) |
| C860 | 0880057R | PF 0.1MF +-10% 50V |
| C880 | 0890074R | CC 100PF +-5% 50V(SL) |
| C883 | 0890079R | CC 270PF +-10% 50V(B) |
| ⚠ C901A | AN00144S | PF 0.1MF 250V |
| C902 | AN00144S | PF 0.1MF 250V |
| C903 | 0248593F | CD 4700PF +80%-20% 250V(F) |
| C904 | 0248593F | CD 4700PF +80%-20% 250V(F) |
| C905 | 0248594F | CD 0.01MF +80%-20% 250V(F) |

C29-F100

**制品安全上的注意**: 在下表附带⚠标记的机件具备特别的安全特性。要替换这些机件以前请详细阅读这检修手册中“制品安全上的注意: 一书，以避免因检修不当而降低电视机的安全性。

| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| C906 | AL00095 | EL 330UF 450V |
| C907 | 0244215 | CD 2200PF +-10% 2KV(R) |
| C908 | AN00624R | PF 0.01MF +-10% 50V |
| C909 | 0890075R | CC 120PF +-5% 50V(SL) |
| C910 | 0880005R | PF 0.0022MF +-10% 50V |
| C911 | 0270743R | PF 0.47MF 50V |
| C912 | AN00624R | PF 0.01MF +-10% 50V |
| C913 | 0270741R | PF 0.33MF +-5% 50V |
| C914 | 0284436R | EL 100MF 35V(KMF) |
| C915 | 0880005R | PF 0.0022MF +-10% 50V |
| C916 | 0243507R | CD 330PF +-10% 500V(B) |
| C951 | 0244718 | CD 330PF +-10% 2KV(B) |
| C952 | 0243507R | CD 330PF +-10% 500V(B) |
| C953 | AL00911 | EL 220UF 160V(KMF) |
| C954 | 0800368N | EL 2200MF 25V(SMG) |
| C956 | 0800327R | EL 100MF 25V(SMG) |
| C957 | 0243509R | CD 470PF +-10% 500V(B) |
| C958 | AN00624R | PF 0.01MF +-10% 50V |
| C959 | 0800327R | EL 100MF 25V(SMG) |
| C960 | 0800334R | EL 220MF 10V(SMG) |
| C961 | 0800294R | EL 10MF 50V(SMG) |
| ⚠ C998 | AJ00601 | PF 1000PF 250V |
| ⚠ C999 | AJ00603 | PF 2200PF 250V |
| CA15 | AN00624R | PF 0.01MF +-10% 50V |
| CA16 | 0800326R | EL 100MF 16V(SMG) |
| CA17 | 0800326R | EL 100MF 16V(SMG) |
| CA18 | 0800279R | EL 1MF 50V(SMG) |
| CA19 | 0800294R | EL 10MF 50V(SMG) |
| CA20 | 0800299R | EL 22MF 16V(SMG) |
| CA21 | 0880049R | PF 0.027MF +-10% 50V |
| CA22 | AN00624R | PF 0.01MF +-10% 50V |
| CA23 | 0800294R | EL 10MF 50V(SMG) |
| CA24 | 0800294R | EL 10MF 50V(SMG) |
| CA25 | 0880054R | PF 0.056MF +-10% 50V |
| CA27 | 0880052R | PF 0.039MF +-10% 50V |
| CA29 | 0800326R | EL 100MF 16V(SMG) |
| CA30 | 0800294R | EL 10MF 50V(SMG) |
| CA59 | 0800294R | EL 10MF 50V(SMG) |
| CA60 | 0800294R | EL 10MF 50V(SMG) |
| CE77 | 0800048R | EL 100MF 10V(SME) |
| | | (For NICAM/A2 models only) |
| CE82 | 0800048R | EL 100MF 10V(SME) |
| | | (For NICAM/A2 models only) |
| CF02 | 0299929F | PF 0.18MF +-10% 200V |
| CF03 | 0299922F | PF 0.042MF +-10% 200V |
| CF06 | 0244212 | CD 1200PF +-10% 2KV |
| CF06A | 0244202F | CD 470PF +-10% 2KV |
| D001 | 2338321M | DI 1SS270 |
| D002 | CH00231A | LED(RED) |
| D003 | CH00232 | LED(GREEN) |
| D006 | 2338321M | DI 1SS270 |
| D201 | 2338321M | DI 1SS270 |
| D301 | 2338321M | DI 1SS270 |
| D302 | 2338321M | DI 1SS270 |
| D303 | 2338321M | DI 1SS270 |
| D304 | 2338321M | DI 1SS270 |
| D305 | 2339869M | ZD HZS9C3 |
| D305 | 2339869M | ZD HZS9C3 |
| D312 | 2338321M | DI 1SS270 |
| D313 | 2338321M | DI 1SS270 - T/text model only |
| D402 | 2333001M | DI RU2M |
| D403 | 2339885M | ZD HZS12B2 |
| D404 | 2339885M | ZD HZS12B2 |
| D405 | 2344041M | DI 1SS254 |
| D407 | 2339481M | DI AS01Z 200V |
| D408 | 2338321M | DI 1SS270 |
| D414 | 2338321M | DI 1SS270 |
| D415 | 2338321M | DI 1SS270 |
| D514 | 2339869M | ZD HZS9C3 |
| D515 | 2339869M | ZD HZS9C3 |
| D516 | 2339869M | ZD HZS9C3 |
| D610 | CH00681M | DI 11ES2 200V |
| D612 | 2337341M | DI 1SS270A |
| D613 | 2344041M | DI 1SS254 |
| D614 | 2337341M | DI 1SS270A |
| D654 | 2338321M | DI 1SS270 |
| D701 | 2348511 | DI RS3FS |
| D703 | 2344071 | DI ERC20M-04 |
| D704 | 2359401 | DI FMP-G12S |
| D705 | 2338902M | DI DFM1SA4 |
| D706 | CH00711M | DI 10ELS2 |
| D707 | 2338902M | DI DFM1SA4 |
| D709 | 2348511 | DI RS3FS |
| D710 | 2344041M | DI 1SS254 |
| D741 | CH00711M | DI 10ELS2 |
| D742 | 2339885M | ZD HZS12B2 |
| D746 | 2339212M | ZD HZS24-2L |
| D747 | 2335991M | ZD HZT33-02 |
| D748 | 2339151M | ZD HZS7B1L |
| D749 | 2344041M | DI 1SS254 |



**PRODUCT SAFETY NOTE:** Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| D753A | 2338321M | DI 1SS270 |
| D758 | 2338321M | DI 1SS270 |
| D794 | 2338321M | DI 1SS270 |
| D795 | 2338321M | DI 1SS270 |
| D801 | 2339051M | ZD HZS7B1L |
| D802 | 2339051M | ZD HZS7B1L |
| D803 | 2339051M | ZD HZS7B1L |
| D812 | 2344041M | DI 1SS254 |
| D813 | 2344041M | DI 1SS254 |
| D814 | 2344041M | DI 1SS254 |
| D818 | 2339881M | ZD HZS12A1 |
| D819 | 2339881M | ZD HZS12A1 |
| D820 | 2339881M | ZD HZS12A1 |
| D843 | 2339491M | DI AM01Z 200V |
| D844 | 2339491M | DI AM01Z 200V |
| D845 | 2339491M | DI AM01Z 200V |
| D846 | 2339491M | DI AM01Z 200V |
| D848 | 2344041M | DI 1SS254 |
| D901 | 2338314 | DI RBV-406M (LF-A) |
| D902 | 2338321M | DI 1SS270 |
| D903 | 2333001M | DI RU2M |
| D904 | 2337341M | DI 1SS270A |
| D905 | CH00711M | DI 10ELS2 |
| D906 | 2338321M | DI 1SS270 |
| D907 | 2337341M | DI 1SS270A |
| D908 | 2333001M | DI RU2M |
| D909 | CH00711M | DI 10ELS2 |
| D951 | 2349983 | DI BYR 29F-600 |
| D952 | 2349991 | DI BYW 29F-200 |
| DE41 | 2339862M | ZD HZS9A2 |
| | | (For NICAM/A2 models only) |
| DK054 | 2338321M | DI 1SS270 |
| E201 | 2122652M | FERRITE CORE W/LEAD |
| E201 | 2774731R | FERRITE BEAD CORE W/LEAD |
| E2A1 | ED00363 | 5P PIN POST |
| E2A1 | ED00363 | 5P PIN POST |
| E2A2 | ED00363 | 5P PIN POST |
| E2A2 | ED00363 | 5P PIN POST |
| E301 | 2693884 | 6P JACK |
| E302 | 2693853 | TERMINAL BOARDS |
| E304 | EU00582 | TERMINAL BOARDS 3PIN JACK |
| E402 | 2723101J | 2P PLUG PIN W/BASE |
| E403 | 2723102J | 3P PLUG PIN W/BASE |
| E502 | 2902269 | 10P MINI PLUG PIN W/BASE |
| | | (For T/text models only) |
| E701 | 2665272 | 4P PLUG PIN W/BASE |
| ⚠ E903 | 2972591A | AC POWER CORD |
| | | (For 081S/941/433/195/121 only) |
| ⚠ E903 | 2972591K | AC POWER CORD - 021 only |
| ⚠ E903 | 2972581A | AC POWER CORD |
| | | (For 191/192/981/982 only) |
| ⚠ E903 | 2972584/5 | AC POWER CORD - 041 only |
| ⚠ E903 | EV00001 | AC POWER CORD - 751 only |
| ⚠ E903 | EV00001A | AC POWER CORD - 195/196 only |
| ⚠ E903 | EV00071C | AC POWER CORD - 051 only |
| E904 | 2903544 | 4P PLUG PIN W/BASE |
| E905 | EK00901 | 2J CONN. WIRE W/AMPIN |
| E906L | 2729252BR | FUSE HOLDER |
| E906R | 2729252BR | FUSE HOLDER |
| E907 | 2903547 | 1P PLUG PIN W/BASE |
| E951 | 2903547 | 1P PLUG PIN W/BASE |
| ⚠ ECPT | EY00413 | CRT SOCKET |
| EH304 | EF09012 | IP CONNECTOR W/AMPIN |
| EPDF | 2903547 | 1P PLUG PIN W/BASE |
| EPH | 2903543 | 3P PLUG PIN W/BASE |
| EY1 | EF06413 | 7P CONNECTOR |
| EY2 | EF06412 | 5P CONNECTOR |
| ⚠ F901 | 2721615 | FUSE 3.15A |
| FB901 | 2123468M | FERRITE BEADS B 0.8 MH |
| FB902 | 2123468M | FERRITE BEADS B 0.8 MH |
| FB903 | 2123468M | FERRITE BEADS B 0.8 MH |
| FB904 | 2123462M | FERRITE BEADS B 2.3MH |
| FB951 | 2123462M | FERRITE BEADS B 2.3MH |
| FB952 | 2123462M | FERRITE BEADS B 2.3MH |
| FB953 | 2123462M | FERRITE BEADS B 2.3MH |
| FB954 | 2123462M | FERRITE BEADS B 2.3MH |
| FB998 | 2123468M | FERRITE BEADS B 0.8 MH |
| G801 | CJ00071R | SPARK GAP |
| G802 | CJ00071R | SPARK GAP |
| G803 | CJ00071R | SPARK GAP |
| GF01 | CJ00072R | SPARK GAP |
| H301 | HP00151 | Y/C COMB FILTER |
| H304 | 2903547 | 1P PLUG PIN W/BASE |
| I001 | CP04801U | IC M37221MA-054SP |
| I002 | CP03981 | IC S24C08A |

I002(Memory IC) needs to programe by factory before placement. As different programes are for different models, serviceman please indicate the model name and destination code when purchase this part to ensure correct programe provided.
e.g. CP03981 IC S24C08A(C29-F100-051)

**制品安全上的注意**: 在下表附带⚠标记的机件具备特别的安全特性。要替换这些机件以前请详细阅读这检修手册中“制品安全上的注意: 一书，以避免因检修不当而降低电视机的安全性。

| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| I003 | CP02871R | TRS IC KIA7042P |
| I004 | CP02411 | IC K1A7805PI |
| I201 | CP03771 | IC LA7566 |
| I301 | CP04971 | IC MM1250XD |
| I401 | CP01831 | IC M62420SP |
| I451 | 2004022 | IC AN7147N |
| I501 | CP03791U | IC TB1226AN |
| I601 | CP03651 | IC TA8427K |
| IA02 | CP01251U | IC AN7395K |
| ⚠ IC901 | 2917783 | IC CNX82A 300 |
| IC951 | CP04771 | IC KIA7809PI |
| J401 | 2672041 | HEADPHONE JACK |
| L001 | 2123461M | FERRITE BEADS B 0.8 MH |
| L002 | 2123461M | FERRITE BEADS B 0.8 MH |
| L101 | 2123781R | PEAKING COIL 100MH +-10% |
| L201 | 2123415M | AXIAL COIL 2.2MH +-10% |
| | | (Not for NICAM/A2 models) |
| L203 | BH00614 | VCO COIL 38.9MHZ |
| L207 | 2123104M | AXIAL COIL 12MH +-10% |
| L208 | 2123102M | AXIAL COIL 8.2MH +-10% |
| L209 | 2123103M | AXIAL COIL 10MH +-10% |
| L210 | 2123461M | FERRITE BEADS B 0.8 MH |
| L2A1 | 2123412M | AXIAL COIL 1.2MH +-10% |
| L2A1 | 2123412M | AXIAL COIL 1.2MH +-10% |
| L2A2 | 2123415M | AXIAL COIL 2.2MH +-10% |
| L2A2 | 2123415M | AXIAL COIL 2.2MH +-10% |
| L301 | 2123781R | PEAKING COIL 100MH +-10% |
| L302 | 2123781R | PEAKING COIL 100MH +-10% |
| L303 | 2123781R | PEAKING COIL 100MH +-10% |
| L304 | 2123781R | PEAKING COIL 100MH +-10% |
| L380 | 2122949M | AXIAL COIL 33MH +-10% |
| L405 | 2123461M | FERRITE BEADS B 0.8 MH |
| L501 | 2123781R | PEAKING COIL 100MH +-10% |
| L611 | BH00205R | HIGH FREQ. INDUCTOR 22UH |
| L6A1 | 2123781R | PEAKING COIL 100MH +-10% |
| L701 | 2124183 | CHOKE COIL |
| L702 | BZ01371 | LINEARITY COIL 27MH |
| L703 | 2125763R | RADIAL COIL 27MH |
| L704 | 2125808N | COIL 68MH |
| L705 | 2123461M | FERRITE BEADS B 0.8 MH |
| L710 | BH00214R | FILTER COIL 100MH |
| L7A1 | 2123781R | PEAKING COIL 100MH +-10% |
| L805 | 2123781R | PEAKING COIL 100MH +-10% |
| L807 | 2122943M | AXIAL COIL 10MH +-10% |
| L841 | 2122937M | AXIAL COIL 3.9MH +-10% |
| L842 | 2123468M | FERRITE BEADS B 0.8 MH |
| L843 | 2123468M | FERRITE BEADS B 0.8 MH |
| L844 | 2123468M | FERRITE BEADS B 0.8 MH |
| ⚠ L901 | BZ02121 | LINE FILTER |
| ⚠ L902 | BZ02122 | LINE FILTER - 041/433/751 only |
| L903 | BH00737R | CHOKE COIL 180MH |
| L905 | 2276065 | DEGAUSSING COIL |
| L951 | BH00734R | PEAKING COIL 100MH |
| L952 | BH00734R | PEAKING COIL 100MH |
| LE13 | 2123461M | FERRITE BEADS B 0.8 MH |
| LE16 | 2123781R | PEAKING COIL 100MH +-10% |
| | | (For NICAM/A2 models only) |
| LE39 | 2123103M | AXIAL COIL 10MH +-10% |
| | | (For NICAM/A2 models only) |
| LE40 | 2123103M | AXIAL COIL 10MH +-10% |
| PCG | 2903542 | 2P PLUG PIN W/BASE |
| PR901 | AZ00102M | 1A PROTECTOR |
| PR951 | AZ00106M | 3A PROTECTOR |
| PVMC | 2902261 | 2P MINI PLUG PIN W/BASE |
| PY1 | ED00386 | CP-07BP2R5V LOCK |
| PY2 | ED00384 | 6P CONNECTOR BASE |
| Q001 | CF01421R | TRS. KTC3198 GR |
| Q002 | CF01421R | TRS. KTC3198 GR |
| Q204 | CF01431R | TRS. KTA 1266Y |
| Q205 | 2326872R | TRS. DTC114ES |
| Q206 | 2326872R | TRS. DTC114ES |
| Q2A1 | 2326872R | TRS. DTC114ES |
| Q2A1 | 2326872R | TRS. DTC114ES |
| Q2A2 | 2320144M | TRS. 2SC1906 |
| Q2A2 | 2320144M | TRS. 2SC1906 |
| Q2A3 | 2320144M | TRS. 2SC1906 |
| Q2A3 | 2320144M | TRS. 2SC1906 |
| Q301 | CF01421R | TRS. KTC3198 GR |
| Q302 | 2326872R | TRS. DTC114ES |
| Q303 | CF01431R | TRS. KTA 1266Y |
| Q304 | CF01431R | TRS. KTA 1266Y |
| Q305 | CF01431R | TRS. KTA 1266Y |
| Q306 | CF01431R | TRS. KTA 1266Y |
| Q401 | CF01421R | TRS. KTC3198 GR |
| | | (Not for NICAM/A2 models) |
| Q402 | CF01421R | TRS. KTC3198 GR |
| | | (For NICAM/A2 models only) |
| Q408 | CF01431R | TRS. KTA 1266Y |
| Q409 | CF01421R | TRS. KTC3198 GR |
| Q410 | CF01421R | TRS. KTC3198 GR |



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| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| Q501 | 2326873R | TRS. DTC144ES |
| Q604 | CF01431R | TRS. KTA 1266Y |
| Q661 | 2315933 | TRS. 2SB1548A-P/Q |
| Q662 | 2323522M | TRS. 2SD789E |
| Q663 | CF01431R | TRS. KTA 1266Y |
| Q664 | CF01421R | TRS. KTC3198 GR |
| Q665 | CF01421R | TRS. KTC3198 GR |
| Q666 | CF01421R | TRS. KTC3198 GR |
| Q708 | 2315451 | TRS. BU2508AF |
| Q709 | 2326216 | TRS. 2SC3116 S/T |
| Q722 | 2312171 | TRS. 2SC3852 |
| Q723 | 2312171 | TRS. 2SC3852 |
| Q724 | CF01431R | TRS. KTA 1266Y |
| Q740 | CF01421R | TRS. KTC3198 GR |
| Q741 | 2321112M | TRS. 2SA778AK-02 |
| Q755 | CJ00161R | TRS. BT149-B |
| Q801 | CF01841F | TRS. 2SC4075 D/E |
| Q802 | CF01841F | TRS. 2SC4075 D/E |
| Q803 | CF01841F | TRS. 2SC4075 D/E |
| Q807 | 2320663M | TRS. 2SC1213AC |
| Q808 | 2320663M | TRS. 2SC1213AC |
| Q809 | 2320663M | TRS. 2SC1213AC |
| Q841 | 2312941M | TRS. 2SC3413BC/1740S Q/R |
| Q842 | 2312941M | TRS. 2SC3413BC/1740S Q/R |
| Q843 | 2312941M | TRS. 2SC3413BC/1740S Q/R |
| Q844 | 2312941M | TRS. 2SC3413BC/1740S Q/R |
| Q845 | 2312941M | TRS. 2SC3413BC/1740S Q/R |
| Q846 | 2327783M | TRS. 2SC3553 C/D |
| Q847 | 2321351M | TRS. 2SA836/844D/E |
| Q848 | CF02231 | TRS. 2SA1606E |
| Q849 | CF02241 | TRS. 2SC4159E |
| Q850 | 2312941M | TRS. 2SC3413BC/1740S Q/R |
| Q851 | 2312941M | TRS. 2SC3413BC/1740S Q/R |
| Q852 | 2320637M | TRS. 2SA673 C/D |
| Q901 | CF01431R | TRS. KTA 1266Y |
| Q902 | CF01221 | TRS. BD329 |
| Q903 | 2314792 | TRS. BUT12AF/ON4959 |
| Q904 | CF01421R | TRS. KTC3198 GR |
| Q905 | CF01831 | TRS. KTD2058Y |
| Q951 | CF01821R | TRS. KTC3206Y |
| Q952 | CF01421R | TRS. KTC3198 GR |
| Q953 | CF01851 | TRS. KTA 1658Y |
| Q954 | CF01421R | TRS. KTC3198 GR |
| Q956 | CF01421R | TRS. KTC3198 GR |
| Q957 | CF01851 | TRS. KTA 1658Y |
| Q958 | CF01421R | TRS. KTC3198 GR |
| R001 | 0700056M | CF 15K OHM +-5% 1/16W |
| R002 | 0700041M | CF 1K OHM +-5% 1/16W |
| R003 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R004 | 0700054M | CF 10K OHM +-5% 1/16W |
| R005 | 0700055M | CF 12K OHM +-5% 1/16W |
| R006 | 0700041M | CF 1K OHM +-5% 1/16W |
| R007 | 0700043M | CF 1.5K OHM +-5% 1/16W |
| R009 | 0700054M | CF 10K OHM +-5% 1/16W |
| R010 | 0700043M | CF 1.5K OHM +-5% 1/16W |
| R011 | 0700058M | CF 22K OHM +-5% 1/16W |
| R012 | 0700054M | CF 10K OHM +-5% 1/16W |
| R013 | 0700058M | CF 22K OHM +-5% 1/16W |
| R014 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R015 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R016 | 0700027M | CF 100 OHM +-5% 1/16W |
| R017 | 0700047M | CF 3.3K OHM +-5% 1/16W |
| R018 | 0700041M | CF 1K OHM +-5% 1/16W |
| R019 | 0700041M | CF 1K OHM +-5% 1/16W |
| R020 | 0700053M | CF 8.2K OHM +-5% 1/16W |
| R021 | 0700041M | CF 1K OHM +-5% 1/16W |
| R022 | 0700054M | CF 10K OHM +-5% 1/16W |
| R023 | 0700062M | CF 39K OHM +-5% 1/16W |
| R024 | 0700062M | CF 39K OHM +-5% 1/16W |
| R025 | 0700067M | CF 100K OHM +-5% 1/16W |
| R026 | 0700067M | CF 100K OHM +-5% 1/16W |
| R027 | 0700056M | CF 15K OHM +-5% 1/16W |
| R028 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R029 | 0700041M | CF 1K OHM +-5% 1/16W |
| R030 | 0700027M | CF 100 OHM +-5% 1/16W |
| R031 | 0700058M | CF 22K OHM +-5% 1/16W |
| R032 | 0700041M | CF 1K OHM +-5% 1/16W |
| R033 | 0700056M | CF 15K OHM +-5% 1/16W |
| R034 | 0700027M | CF 100 OHM +-5% 1/16W |
| R035 | 0700027M | CF 100 OHM +-5% 1/16W |
| R036 | 0700041M | CF 1K OHM +-5% 1/16W |
| R037 | 0700041M | CF 1K OHM +-5% 1/16W |
| R038 | 0700041M | CF 1K OHM +-5% 1/16W |
| R039 | 0700027M | CF 100 OHM +-5% 1/16W |
| R040 | 0700027M | CF 100 OHM +-5% 1/16W |
| R042 | 0700041M | CF 1K OHM +-5% 1/16W |
| R043 | 0700046M | CF 2.7K OHM +-5% 1/16W |
| R044 | 0700046M | CF 2.7K OHM +-5% 1/16W |
| R045 | 0700046M | CF 2.7K OHM +-5% 1/16W |
| R046 | 0700046M | CF 2.7K OHM +-5% 1/16W |

**制品安全上的注意**: 在下表附带⚠标记的机件具备特别的安全特性。要替换这些机件以前请详细阅读这检修手册中“制品安全上的注意: 一书，以避免因检修不当而降低电视机的安全性。

| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| R047 | 0700046M | CF 2.7K OHM +-5% 1/16W |
| R048 | 0700046M | CF 2.7K OHM +-5% 1/16W |
| R050 | 0700043M | CF 1.5K OHM +-5% 1/16W |
| R051 | 0700043M | CF 1.5K OHM +-5% 1/16W |
| R052 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R053 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R055 | 0700041M | CF 1K OHM +-5% 1/16W |
| R056 | 0700041M | CF 1K OHM +-5% 1/16W |
| R057 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R078 | 0700067M | CF 100K OHM +-5% 1/16W |
| R095 | 0700027M | CF 100 OHM +-5% 1/16W |
| R101 | 0700023M | CF 47 OHM +-5% 1/16W |
| R102 | 0700023M | CF 47 OHM +-5% 1/16W |
| R205 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R208 | 0700041M | CF 1K OHM +-5% 1/16W |
| R209 | 0700065M | CF 68K OHM +-5% 1/16W |
| R213 | 0700037M | CF 560 OHM +-5% 1/16W |
| R214 | 0700056M | CF 15K OHM +-5% 1/16W |
| R216 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R217 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R218 | 0700054M | CF 10K OHM +-5% 1/16W |
| R219 | 0700027M | CF 100 OHM +-5% 1/16W |
| | | (For NICAM/A2 models only) |
| R221 | 0700031M | CF 180 OHM +-5% 1/16W |
| R223 | 0700063M | CF 47K OHM +-5% 1/16W |
| R224 | 0700037M | CF 560 OHM +-5% 1/16W |
| R225 | 0700041M | CF 1K OHM +-5% 1/16W |
| R226 | 0700062M | CF 39K OHM +-5% 1/16W |
| R227 | 0700033M | CF 270 OHM +-5% 1/16W |
| R228 | 0700037M | CF 560 OHM +-5% 1/16W |
| R229 | 0700036M | CF 470 OHM +-5% 1/16W |
| R234 | 0700041M | CF 1K OHM +-5% 1/16W |
| R235 | 0700037M | CF 560 OHM +-5% 1/16W |
| R237 | 0187058M | CF 510 OHM +-5% 1/16W |
| R238 | 0700039M | CF 820 OHM +-5% 1/16W |
| R240 | 0700038M | CF 680 OHM +-5% 1/16W |
| R264 | 0700041M | CF 1K OHM +-5% 1/16W |
| R265 | 0700047M | CF 3.3K OHM +-5% 1/16W |
| R266 | 0700054M | CF 10K OHM +-5% 1/16W |
| R267 | 0700063M | CF 47K OHM +-5% 1/16W |
| R268 | 0700061M | CF 33K OHM +-5% 1/16W |
| R2A1 | 0700014M | CF 10 OHM +-5% 1/16W |
| R2A1 | 0700014M | CF 10 OHM +-5% 1/16W |
| R2A2 | 0700025M | CF 68 OHM +-5% 1/16W |
| R2A2 | 0700025M | CF 68 OHM +-5% 1/16W |
| R2A3 | 0700058M | CF 22K OHM +-5% 1/16W |
| R2A3 | 0700058M | CF 22K OHM +-5% 1/16W |
| R2A4 | 0700023M | CF 47 OHM +-5% 1/16W |
| R2A4 | 0700023M | CF 47 OHM +-5% 1/16W |
| R2A5 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R2A5 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R2A6 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R2A6 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R2A7 | 0700044M | CF 1.8K OHM +-5% 1/16W |
| R2A7 | 0700044M | CF 1.8K OHM +-5% 1/16W |
| R2A8 | 0700037M | CF 560 OHM +-5% 1/16W |
| R2A8 | 0700037M | CF 560 OHM +-5% 1/16W |
| R2A9 | 0700016M | CF 15 OHM +-5% 1/16W |
| R2A9 | 0700016M | CF 15 OHM +-5% 1/16W |
| R2B1 | 0700027M | CF 100 OHM +-5% 1/16W |
| R2B1 | 0700027M | CF 100 OHM +-5% 1/16W |
| R2B2 | 0114135M | CF 150 OHM +-5% 1/4W |
| R2B2 | 0114135M | CF 150 OHM +-5% 1/4W |
| R2B3 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R2B3 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R2B4 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R2B4 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R2B5 | 0700014M | CF 10 OHM +-5% 1/16W |
| R2B5 | 0700014M | CF 10 OHM +-5% 1/16W |
| R2B6 | 0700027M | CF 100 OHM +-5% 1/16W |
| R2B6 | 0700027M | CF 100 OHM +-5% 1/16W |
| R2B7 | 0700032M | CF 220 OHM +-5% 1/16W |
| R2B7 | 0700032M | CF 220 OHM +-5% 1/16W |
| R2B8 | 0114135M | CF 150 OHM +-5% 1/4W |
| R2B8 | 0114135M | CF 150 OHM +-5% 1/4W |
| R2C1 | 0150306 | VR 20K OHM(B) |
| R2C1 | 0150306 | VR 20K OHM(B) |
| R302 | 0100038M | CF 75 OHM +-5% 1/18W |
| R303 | 0100041M | CF 100 OHM +-5% 1/18W |
| R304 | 0100113M | CF 100K OHM +-5% 1/18W |
| R305 | 0100041M | CF 100 OHM +-5% 1/18W |
| R306 | 0100105M | CF 47K OHM +-5% 1/18W |
| R307 | 0100041M | CF 100 OHM +-5% 1/18W |
| R308 | 0100037M | CF 56 OHM +-5% 1/18W |
| R309 | 0100045M | CF 150 OHM +-5% 1/18W |
| R310 | 0700027M | CF 100 OHM +-5% 1/16W |
| R312 | 0100113M | CF 100K OHM +-5% 1/18W |
| R313 | 0100041M | CF 100 OHM +-5% 1/18W |
| R314 | 0100105M | CF 47K OHM +-5% 1/18W |
| R315 | 0100041M | CF 100 OHM +-5% 1/18W |



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| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| R318 | 0100038M | CF 75 OHM +-5% 1/18W |
| R319 | 0100041M | CF 100 OHM +-5% 1/18W |
| R320 | 0100113M | CF 100K OHM +-5% 1/18W |
| R321 | 0700058M | CF 22K OHM +-5% 1/16W |
| R322 | 0700056M | CF 15K OHM +-5% 1/16W |
| R324 | 0100129M | CF 470K OHM +-5% 1/18W |
| R326 | 0100129M | CF 470K OHM +-5% 1/18W |
| R329 | 0700049M | CF 4.7K OHM +-5% 1/16W |
| R330 | 0700027M | CF 100 OHM +-5% 1/16W |
| R335 | 0700054M | CF 10K OHM +-5% 1/16W |
| R340 | 0700027M | CF 100 OHM +-5% 1/16W |
| R341 | 0700027M | CF 100 OHM +-5% 1/16W |
| R342 | 0700027M | CF 100 OHM +-5% 1/16W |
| R343 | 0100041M | CF 100 OHM +-5% 1/18W |
| R344 | 0100041M | CF 100 OHM +-5% 1/18W |
| R345 | 0100041M | CF 100 OHM +-5% 1/18W |
| R348 | 0700027M | CF 100 OHM +-5% 1/16W |
| R349 | 0700027M | CF 100 OHM +-5% 1/16W |
| R350 | 0700027M | CF 100 OHM +-5% 1/16W |
| R354 | 0700036M | CF 470 OHM +-5% 1/16W |
| R355 | 0100038M | CF 75 OHM +-5% 1/18W |
| R373 | 0119514S | MG 10 OHM +-5% 1/4W |
| R374 | 0100121M | CF 220K OHM +-5% 1/18W |
| R380 | 0700044M | CF 1.8K OHM +-5% 1/16W |
| R381A | 0700032M | CF 220 OHM +-5% 1/16W |
| R386 | 0700037M | CF 560 OHM +-5% 1/16W |
| R387 | 0700027M | CF 100 OHM +-5% 1/16W |
| R388 | 0100065M | CF 1K OHM +-5% 1/18W |
| R389 | 0700027M | CF 100 OHM +-5% 1/16W |
| R390 | 0700036M | CF 470 OHM +-5% 1/16W |
| R391 | 0700036M | CF 470 OHM +-5% 1/16W |
| R392 | 0100053M | CF 330 OHM +-5% 1/18W |
| R393 | 0700038M | CF 680 OHM +-5% 1/16W |
| R394 | 0700027M | CF 100 OHM +-5% 1/16W |
| R395 | 0100057M | CF 470 OHM +-5% 1/18W |
| R396 | 0700037M | CF 560 OHM +-5% 1/16W |
| R397 | 0700027M | CF 100 OHM +-5% 1/16W |
| R3A1 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R401 | 0700027M | CF 100 OHM +-5% 1/16W |
| | | (Not for NICAM/A2 models) |
| R403 | 0700041M | CF 1K OHM +-5% 1/16W |
| | | (Not for NICAM/A2 models) |
| R404 | 0700034M | CF 330 OHM +-5% 1/16W |
| | | (Not for NICAM/A2 models) |
| R405 | 0700034M | CF 330 OHM +-5% 1/16W |
| | | (Not for NICAM/A2 models) |
| R406 | 0700034M | CF 330 OHM +-5% 1/16W |
| | | (Not for NICAM/A2 models) |
| R407 | 0700034M | CF 330 OHM +-5% 1/16W |
| | | (Not for NICAM/A2 models) |
| R408 | 0700041M | CF 1K OHM +-5% 1/16W |
| | | (For NICAM/A2 models only) |
| R409 | 0110337S | MF 470 OHM +-5% 3W |
| R410 | 0700042M | CF 1.2K OHM +-5% 1/16W |
| R411 | 0700042M | CF 1.2K OHM +-5% 1/16W |
| R412 | 0119505G | MG 2.2 OHM +-5% 1/4W |
| R413 | 0119505G | MG 2.2 OHM +-5% 1/4W |
| R414 | 0700064M | CF 56K OHM +-5% 1/16W |
| R415 | 0700048M | CF 3.9K OHM +-5% 1/16W |
| R416 | 0700048M | CF 3.9K OHM +-5% 1/16W |
| R417 | 0700041M | CF 1K OHM +-5% 1/16W |
| R418 | 0700041M | CF 1K OHM +-5% 1/16W |
| R480 | 0119514S | MG 10 OHM +-5% 1/4W |
| R481 | 0114141M | CF 270 OHM +-5% 1/4W |
| R483 | 0700067M | CF 100K OHM +-5% 1/16W |
| R484 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R486 | 0700027M | CF 100 OHM +-5% 1/16W |
| R487 | 0700027M | CF 100 OHM +-5% 1/16W |
| R488 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R492 | 0100063M | CF 820 OHM +-5% 1/18W |
| R493 | 0100063M | CF 820 OHM +-5% 1/18W |
| R494 | 0700041M | CF 1K OHM +-5% 1/16W |
| R495 | 0700041M | CF 1K OHM +-5% 1/16W |
| R499 | 0147118 | WW 1.0 OHM +-5% 3W |
| R502 | 0700027M | CF 100 OHM +-5% 1/16W |
| R504 | 0100041M | CF 100 OHM +-5% 1/18W |
| R505 | 0100041M | CF 100 OHM +-5% 1/18W |
| R506 | 0100041M | CF 100 OHM +-5% 1/18W |
| R507 | 0700027M | CF 100 OHM +-5% 1/16W |
| R508 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R509 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R510 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R512 | 0700041M | CF 1K OHM +-5% 1/16W |
| R514 | 0700041M | CF 1K OHM +-5% 1/16W |
| R516 | 0700041M | CF 1K OHM +-5% 1/16W |
| R517 | 0700041M | CF 1K OHM +-5% 1/16W |
| R518 | 0700041M | CF 1K OHM +-5% 1/16W |
| R519 | 0700054M | CF 10K OHM +-5% 1/16W |

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| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| R520 | 0700027M | CF 100 OHM +-5% 1/16W |
| R521 | 0700027M | CF 100 OHM +-5% 1/16W |
| R522 | 0700027M | CF 100 OHM +-5% 1/16W |
| R533 | 0700027M | CF 100 OHM +-5% 1/16W |
| R534 | 0700027M | CF 100 OHM +-5% 1/16W |
| R535 | 0700044M | CF 1.8K OHM +-5% 1/16W |
| R536 | 0700027M | CF 100 OHM +-5% 1/16W |
| | | (For T/text models only) |
| R537 | 0700027M | CF 100 OHM +-5% 1/16W |
| | | (For T/text models only) |
| R554 | 0700036M | CF 470 OHM +-5% 1/16W |
| R555 | 0700054M | CF 10K OHM +-5% 1/16W |
| | | (Not for T/text models) |
| R611 | 0700048M | CF 3.9K OHM +-5% 1/16W |
| R612 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R613 | 0700067M | CF 100K OHM +-5% 1/16W |
| R614 | 0700066M | CF 82K OHM +-5% 1/16W |
| R615 | 0188123M | CF 270 OHM +-5% 1/2W |
| R617 | 0100127M | CF 390K OHM +-5% 1/18W |
| R618 | 0700061M | CF 33K OHM +-5% 1/16W |
| R621 | 0119722M | MF 1.0 OHM +-5% 1W |
| R631 | 0700058M | CF 22K OHM +-5% 1/16W |
| R632 | 0119722M | MF 1.0 OHM +-5% 1W |
| R633 | 0700054M | CF 10K OHM +-5% 1/16W |
| R651 | 0188135M | CF 2.2K OHM +-5% 1/2W |
| R653 | 0700046M | CF 2.7K OHM +-5% 1/16W |
| R654 | 0700067M | CF 100K OHM +-5% 1/16W |
| R655 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R656 | 0150156 | VR 10K OHM(B) |
| R657 | 0150156 | VR 10K OHM(B) |
| R658 | 0700054M | CF 10K OHM +-5% 1/16W |
| R659 | 0700054M | CF 10K OHM +-5% 1/16W |
| R660 | 0700063M | CF 47K OHM +-5% 1/16W |
| R661 | 0700049M | CF 4.7K OHM +-5% 1/16W |
| R662 | 0700059M | CF 27K OHM +-5% 1/16W |
| R663 | 0179561M | MG 2.2M OHM +-5% 1/8W |
| R664 | 0700054M | CF 10K OHM +-5% 1/16W |
| R665 | 0700054M | CF 10K OHM +-5% 1/16W |
| R666 | 0700041M | CF 1K OHM +-5% 1/16W |
| R668 | 0700067M | CF 100K OHM +-5% 1/16W |
| R669 | 0700053M | CF 8.2K OHM +-5% 1/16W |
| R670 | 0700061M | CF 33K OHM +-5% 1/16W |
| R671 | 0100119M | CF 180K OHM +-5% 1/18W |
| R672 | 0700059M | CF 27K OHM +-5% 1/16W |
| R673 | 0700063M | CF 47K OHM +-5% 1/16W |
| R676 | 0700041M | CF 1K OHM +-5% 1/16W |
| R677 | 0700041M | CF 1K OHM +-5% 1/16W |
| R6A1 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R6A2 | 0700041M | CF 1K OHM +-5% 1/16W |
| R720 | 0110201S | MF 15 OHM +-5% 2W |
| R721 | 0110211S | MF 39 OHM +-5% 2W |
| R722 | 0100057M | CF 470 OHM +-5% 1/18W |
| R723 | 0100049M | CF 220 OHM +-5% 1/18W |
| R724 | 0700041M | CF 1K OHM +-5% 1/16W |
| R725 | 0700054M | CF 10K OHM +-5% 1/16W |
| R727 | 0700054M | CF 10K OHM +-5% 1/16W |
| R730 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| R731 | 0700027M | CF 100 OHM +-5% 1/16W |
| R732 | 0145051S | WW 2.7K OHM +-5% 7W |
| R733 | 0700027M | CF 100 OHM +-5% 1/16W |
| R735 | 0119688M | MF 0.22 OHM +-5% 1W |
| R736 | 0700026M | CF 82 OHM +-5% 1/16W |
| R737 | 0114145M | CF 390 OHM +-5% 1/4W |
| R738 | 0188142M | CF 6.8K OHM +-5% 1/2W |
| R741 | 0100093M | CF 15K OHM +-5% 1/18W |
| R742 | 0114207M | CF 18K OHM +-5% 1/4W |
| R743 | AZ00026M | 2.5A PROTECTOR |
| R744 | AZ00026M | 2.5A PROTECTOR |
| R748 | AZ00026M | 2.5A PROTECTOR |
| R749 | 0100103M | CF 39K OHM +-5% 1/18W |
| R750 | 0700059M | CF 27K OHM +-5% 1/16W |
| R751 | 0700032M | CF 220 OHM +-5% 1/16W |
| R754 | 0114163M | CF 1.2K OHM +-5% 1/4W |
| R755 | 0700039M | CF 820 OHM +-5% 1/16W |
| R760 | 0700063M | CF 47K OHM +-5% 1/16W |
| R760A | 0100093M | CF 15K OHM +-5% 1/18W |
| R772 | 0110243S | MF 820 OHM +-5% 2W |
| R780 | 0110159S | MF 3.9K OHM +-5% 1W |
| R781 | 0110279S | MF 27K OHM +-5% 2W |
| R782 | 0100065M | CF 1K OHM +-5% 1/18W |
| R784 | 0147817A | WW 2.7 OHM +-10% 15W |
| R785 | 0700044M | CF 1.8K OHM +-5% 1/16W |
| R786 | 0100105M | CF 47K OHM +-5% 1/18W |
| R787 | 0700067M | CF 100K OHM +-5% 1/16W |
| R791 | 0700049M | CF 4.7K OHM +-5% 1/16W |
| R794 | 0100101M | CF 33K OHM +-5% 1/18W |
| R796 | 0700072M | CF 220K OHM +-5% 1/16W |
| R797 | 0700055M | CF 12K OHM +-5% 1/16W |
| R7A1 | 0700038M | CF 680 OHM +-5% 1/16W |
| R7A2 | 0700031M | CF 180 OHM +-5% 1/16W |



**PRODUCT SAFETY NOTE:** Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| R7A3 | 0700054M | CF 10K OHM +-5% 1/16W |
| R7A4 | 0100113M | CF 100K OHM +-5% 1/18W |
| R7A5 | 0700053M | CF 8.2K OHM +-5% 1/16W |
| R7A7 | 0700053M | CF 8.2K OHM +-5% 1/16W |
| R802 | 0113744M | CF 560 OHM +-5% 1/2W |
| R803 | 0113744M | CF 560 OHM +-5% 1/2W |
| R804 | 0113744M | CF 560 OHM +-5% 1/2W |
| R805 | AT00383S | MF 8.2K OHM +-5% 3W |
| R806 | AT00383S | MF 8.2K OHM +-5% 3W |
| R807 | AT00383S | MF 8.2K OHM +-5% 3W |
| R808 | 0100041M | CF 100 OHM +-5% 1/18W |
| R809 | 0100041M | CF 100 OHM +-5% 1/18W |
| R810 | 0100041M | CF 100 OHM +-5% 1/18W |
| R814 | 0100049M | CF 220 OHM +-5% 1/18W |
| R815 | 0100049M | CF 220 OHM +-5% 1/18W |
| R816 | 0100049M | CF 220 OHM +-5% 1/18W |
| R817 | 0100071M | CF 1.8K OHM +-5% 1/18W |
| R818 | 0100071M | CF 1.8K OHM +-5% 1/18W |
| R819 | 0100071M | CF 1.8K OHM +-5% 1/18W |
| R822 | 0100041M | CF 100 OHM +-5% 1/18W |
| R823 | 0100041M | CF 100 OHM +-5% 1/18W |
| R824 | 0100041M | CF 100 OHM +-5% 1/18W |
| R825 | 0113815M | CF 470K OHM +-5% 1/2W |
| R836 | 0700039M | CF 820 OHM +-5% 1/16W |
| R837 | 0700039M | CF 820 OHM +-5% 1/16W |
| R838 | 0700041M | CF 1K OHM +-5% 1/16W |
| R839 | 0700035M | CF 390 OHM +-5% 1/16W |
| R841 | 0110141S | MF 680 OHM +-5% 1W |
| R842 | 0700066M | CF 82K OHM +-5% 1/16W |
| R843 | 0700035M | CF 390 OHM +-5% 1/16W |
| R844 | 0700035M | CF 390 OHM +-5% 1/16W |
| R845 | 0700044M | CF 1.8K OHM +-5% 1/16W |
| R846 | 0700059M | CF 27K OHM +-5% 1/16W |
| R847 | 0700065M | CF 68K OHM +-5% 1/16W |
| R848 | 0700059M | CF 27K OHM +-5% 1/16W |
| R849 | 0100057M | CF 470 OHM +-5% 1/18W |
| R853 | 0700067M | CF 100K OHM +-5% 1/16W |
| R854 | 0700058M | CF 22K OHM +-5% 1/16W |
| R855 | 0700047M | CF 3.3K OHM +-5% 1/16W |
| R856 | 0113742M | CF 470 OHM +-5% 1/2W |
| R858 | 0700036M | CF 470 OHM +-5% 1/16W |
| R859 | 0700067M | CF 100K OHM +-5% 1/16W |
| R860 | 0700055M | CF 12K OHM +-5% 1/16W |
| R861 | 0188131M | CF 1K OHM +-5% 1/2W |
| R862 | 0700024M | CF 56 OHM +-5% 1/16W |
| R863 | 0113701M | CF 10 OHM +-5% 1/2W |
| R864 | 0100035M | CF 56 OHM +-5% 1/18W |
| R865 | 0100035M | CF 56 OHM +-5% 1/18W |
| R866 | 0114165M | CF 1.5K OHM +-5% 1/4W |
| R867 | 0100069M | CF 1.5K OHM +-5% 1/18W |
| R868 | 0188132M | CF 1.2K OHM +-5% 1/2W |
| R869 | 0100067M | CF 1.2K OHM +-5% 1/18W |
| R870 | 0188155M | CF 68K OHM +-5% 1/2W |
| R871 | 0114221M | CF 68K OHM +-5% 1/4W |
| R872 | 0113776M | CF 12K OHM +-5% 1/2W |
| R873 | 0113716M | CF 43 OHM +-5% 1/2W |
| R874 | 0113716M | CF 43 OHM +-5% 1/2W |
| R875 | 0113686M | CF 2.7 OHM +-5% 1/2W |
| R876 | 0113686M | CF 2.7 OHM +-5% 1/2W |
| R877 | 0110229S | MF 220 OHM +-5% 2W |
| R879 | 0700041M | CF 1K OHM +-5% 1/16W |
| R880 | 0700061M | CF 33K OHM +-5% 1/16W |
| R884 | 0110132S | MF 300 OHM +-5% 1W |
| R886 | 0700027M | CF 100 OHM +-5% 1/16W |
| R887 | 0113752M | CF 1.2K OHM +-5% 1/2W |
| R889 | 0700033M | CF 270 OHM +-5% 1/16W |
| R890 | 0700029M | CF 150 OHM +-5% 1/16W |
| R891 | 0700045M | CF 2.2K OHM +-5% 1/16W |
| R901 | 0147610A | WW 1.0 OHM +-5% 7W |
| R901A | 0147610A | WW 1.0 OHM +-5% 7W |
| R902 | 0113791M | CF 47K OHM +-5% 1/2W |
| R903 | 0113787M | CF 33K OHM +-5% 1/2W |
| R904 | 0100085M | CF 6.8K OHM +-5% 1/18W |
| R905 | 0147582A | WW 560 OHM +-5% 5W |
| R906 | 0147670A | WW 330 OHM +-5% 7W |
| R907 | 0147072BF | WW 100 OHM +-5% 2W |
| R908 | 0100089M | CF 10K OHM +-5% 1/18W |
| R909 | 0700061M | CF 33K OHM +-5% 1/16W |
| R910 | 0113733M | CF 220 OHM +-5% 1/2W |
| R911 | 0110129S | MF 220 OHM +-5% 1W |
| R912 | 0113725M | CF 100 OHM +-5% 1/2W |
| R913 | 0700032M | CF 220 OHM +-5% 1/16W |
| R914 | 0147126BF | WW 2.2 OHM +-5% 3W |
| R915 | 0114171M | CF 2.7K OHM +-5% 1/4W |
| R916 | 0114163M | CF 1.2K OHM +-5% 1/4W |
| R917 | 0100041M | CF 100 OHM +-5% 1/18W |
| R918 | 0110129S | MF 220 OHM +-5% 1W |
| R920 | 0147662A | WW 150 OHM +-5% 7W |
| R940 | 0110217S | MF 68 OHM +-5% 2W |
| R953 | 0700043M | CF 1.5K OHM +-5% 1/16W |

C29-F100

**制品安全上的注意**: 在下表附带⚠标记的机件具备特别的安全特性。要替换这些机件以前请详细阅读这检修手册中“制品安全上的注意: 一书，以避免因检修不当而降低电视机的安全性。

**PRODUCT SAFETY NOTE:** Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

| SYMBOL No. | PART No. | DESCRIPTIONS |
|---|---|---|
| R957 | 0113756M | CF 1.8K OHM +-5% 1/2W |
| R958 | 0700049M | CF 4.7K OHM +-5% 1/16W |
| R959 | 0700049M | CF 4.7K OHM +-5% 1/16W |
| R960 | 0700049M | CF 4.7K OHM +-5% 1/16W |
| R961 | 0700049M | CF 4.7K OHM +-5% 1/16W |
| R962 | 0113791M | CF 47K OHM +-5% 1/2W |
| R964 | 0100075M | CF 2.7K OHM +-5% 1/18W |
| R965 | 0700048M | CF 3.9K OHM +-5% 1/16W |
| R966 | 0113791M | CF 47K OHM +-5% 1/2W |
| R967 | 0110255S | MF 2.7K OHM +-5% 2W |
| R968 | 0110239S | MF 560 OHM +-5% 2W |
| R969 | 0700054M | CF 10K OHM +-5% 1/16W |
| R970 | 0700049M | CF 4.7K OHM +-5% 1/16W |
| R971 | 0113742M | CF 470 OHM +-5% 1/2W |
| ⚠ R998 | 0174704 | MF 10M OHM +-5% 1W |
| RA10A | 0700048M | CF 3.9K OHM +-5% 1/16W |
| RA11 | 0100117M | CF 150K OHM +-5% 1/18W |
| RA12 | 0700039M | CF 820 OHM +-5% 1/16W |
| RA13 | 0700049M | CF 4.7K OHM +-5% 1/16W |
| RA14 | 0100133M | CF 680K OHM +-5% 1/18W |
| RA19 | 0700054M | CF 10K OHM +-5% 1/16W |
| RA56 | 0700047M | CF 3.3K OHM +-5% 1/16W |
| RA57 | 0700047M | CF 3.3K OHM +-5% 1/16W |
| RA58 | 0700053M | CF 8.2K OHM +-5% 1/16W |
| RA59 | 0700053M | CF 8.2K OHM +-5% 1/16W |
| RDA01 | 0700051M | CF 5.6K OHM +-5% 1/16W |
| RE01 | 0700042M | CF 1.2K OHM +-5% 1/16W |
| | | (Not for NICAM/A2 models) |
| RE02 | 0700044M | CF 1.8K OHM +-5% 1/16W |
| | | (Not for NICAM/A2 models) |
| RE37 | 0700027M | CF 100 OHM +-5% 1/16W |
| | | (For NICAM/A2 models only) |
| RE38 | 0700027M | CF 100 OHM +-5% 1/16W |
| | | (For NICAM/A2 models only) |
| RE39 | 0700027M | CF 100 OHM +-5% 1/16W |
| | | (Not for NICAM/A2 models) |
| RE40 | 0700027M | CF 100 OHM +-5% 1/16W |
| | | (Not for NICAM/A2 models) |
| RE41 | 0110203S | MF 18 OHM +-5% 2W |
| | | (For NICAM/A2 models only) |
| RF01 | 0110161S | MF 4.7K OHM +-5% 1W |
| RK155 | 0700027M | CF 100 OHM +-5% 1/16W |
| RK311 | 0700027M | CF 100 OHM +-5% 1/16W |
| RK312 | 0700027M | CF 100 OHM +-5% 1/16W |
| RK313 | 0700027M | CF 100 OHM +-5% 1/16W |
| RK643 | AZ00104M | 2A PROTECTOR |
| S001 | FE00281 | TACT SW |
| S002 | FE00281 | TACT SW |
| ⚠ S901 | 2634731 | MAIN SWITCH |
| T701 | BS00011 | H.DRIVE TRANS |
| ⚠ T702 | BW01162 | FBT |
| ⚠ T901 | BT00952 | SWITCHING TRANSFORMER |
| TF01 | BT01371 | DF TRANSFORMER |
| TH61 | 2340371 | THERMISTOR |
| TH901 | CJ00131 | PTC THERMISTOR |
| U001 | HJ00133 | TUNER BTP-AH452 |
| U404 | HP00452 | A2 UNIT - 751 only |
| U404 | HP00453 | NICAM UNIT - 081S/051/982 only |
| VR951 | AW00101 | VR 500 OHM(B) |
| WPDF | EF09011 | 1J MINI CONN. W/WIRE |
| WPH | EF09021 | 3J MINI CONN. W/WIRE |
| X001 | CZ00522 | R/C RECEIVER |
| X002 | 2168371 | X'TAL 6MHZ |
| X003 | 2791754R | LC FILTER |
| X004 | 2791754R | LC FILTER |
| X201 | BG00671 | SAW FILTER K6262K |
| X204 | 2167371 | CER TRAP. 5.5/5.74MHZ |
| X205 | 2143472 | CER TRAP 6.0/6.5MHZ |
| X206 | 2142241 | CER TRAP 4.5MHZ |
| X208 | BJ00271 | FILTER SAF33.4M |
| X2A1 | BN00081 | CER FILTER 31.9M |
| X2A1 | BN00081 | CER FILTER 31.9M |
| X301 | 2150411 | DELAY LINE(200Nsec) |
| X302 | 2143893 | TRAP COIL 4.43MHZ |
| X401 | 2167311 | CER. FILTER 4.5MHz |
| | | (Not for NICAM/A2 models) |
| X402 | 2167211A | CER. FILTER 5.5MHz |
| | | (Not for NICAM/A2 models) |
| X403 | 2167212A | CER. FILTER 6.0MHz |
| | | (Not for NICAM/A2 models) |
| X404 | 2167213A | CER. FILTER 6.5MHz |
| | | (Not for NICAM/A2 models) |
| X501 | BP00661 | X'TAL 16.2MHZ |
| ZD721 | 2339854M | ZD HZS7B1 |
| ZD752 | 2339843M | ZD HZS6A3 |
| ZD753 | 2339867 | ZD HZS9C1 |
| ZD901 | 2339834M | ZD HZS5B1 |
| ZD902 | 2339825M | ZD HZS4B2 |
| ZD903 | 2331795M | ZD HZ5B2 |
| ZD904 | 2331795M | ZD HZ5B2 |
| ZD905 | 2339842M | ZD HZS6A2 |
| ZD906 | 2339867M | ZD HZS9C1 |
| ZD908 | 2339921M | ZD HZS20-1 |
| ZD910 | 2331795M | ZD HZ5B2 |
| ZD951 | 2339854M | ZD HZS7B1 |
| ZD952 | 2339222M | ZD HZS27-2L |
| ZD953 | 2339847M | ZD HZS6C1 |
| ZD954 | 2339221M | ZD HZS27-1L |
| | 2776242 | CF MAGNET |
| ⚠ | DE01731 | CRT A68QCU259X(W/DY) |
| ⚠ | DE01732 | CRT A68QCU259X(Without DY) |
| | BY01291 | DY |
| | HL01181 | REMOTE CON. TRX CLE-938 |
| | QD07142 | BACK COVER ASSY |
| | QD07581 | FRAME ASSY(051 only) |
| | QD07582 | FRAME ASSY(081S/982 only) |
| | QD07583 | FRAME ASSY (191/192/941/433/041/981/121 only) |
| | QD07584 | FRAME ASSY(751 only) |

## THE FOLLOWING PART LIST FOR TELETEXT PWB ONLY (081S/982 ONLY)

**PRODUCT SAFETY NOTE:** Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

**ABBREVIATIONS** Capacitors.....CD: Ceramic Disk, PF: Polyester Film, EL: Electrolytic, PP: Polypropylene, PR: Paper, TA: Tantalum, TM: Trimer.
Resistors.....CF: Carbon film, WW: Wire Wound, FR: Fuse Resistor, MG: Metal Glazed, VR: Variable Resistor, CC: Carbon Composition, MF: Metal Oxide Film.
Semiconductors....TR: Transistor, DI: Diode, ZD: Zener Diode, VA: Varistor, TH: Thermistor.

| SYMBOL NO. | PART NO. | DESCRIPTION | SYMBOL NO. | PART NO. | DESCRIPTION |
|---|---|---|---|---|---|
| B001 | JK00692C | T/TEXT SUB PWB | Q006 | CF00875R | TR 2SC5343 Y/G |
| B5201 | JK00072 | S2 T/TEXT PWB | Q007 | CF00865R | TR 2SA1980 Y/G |
| C002 | 0890077R | CD 180PF +-10% 50V(B) | Q008 | CF00875R | TR 2SC5343 Y/G |
| C003 | 0800048R | EL 100MF 10V(SME) | Q5201 | CF00875R | TR 2SC5343 Y/G |
| C006 | 0800001R | EL 0.47MF 50V(SME) | R001 | 0700029M | CF 150 OHM +-5% 1/16W |
| C007 | 0880016R | PF 0.1MF +-10% 50V | R002 | 0700029M | CF 150 OHM +-5% 1/16W |
| C008 | 0880044R | PF 0.01MF +-10% 50V | R003 | 0700034M | CF 330 OHM +-5% 1/16W |
| C009 | 0800049R | EL 100MF 16V(SME) | R004 | 0700049M | CF 4.7K OHM +-5% 1/16W |
| C010 | 0800047R | EL 100MF 6.3V(SME) | R005 | 0700047M | CF 3.3K OHM +-5% 1/16W |
| C020 | 0890087R | CD 0.001MF +-10% 50V(B) | R006 | 0700024M | CF 56 OHM +-5% 1/16W |
| C5200 | 0238296 | CEE PLUG PIN | R007 | 0700041M | CF 1K OHM +-5% 1/16W |
| C5201 | 0800048R | EL 100MF 10V(SME) | R008 | 0700041M | CF 1K OHM +-5% 1/16W |
| C5201 | 0800143 | EL 100MF 6.3V | R009 | 0700041M | CF 1K OHM +-5% 1/16W |
| C5202 | 0270734R | PF 0.1MF +-5% 50V | R012 | 0700027M | CF 100 OHM +-5% 1/16W |
| C5203 | 0880003R | PF 0.001MF +-10% 50V | R015 | 0700027M | CF 100 OHM +-5% 1/16W |
| C5204 | 0890063R | CD 15PF +-5% 50V(SL) | R016 | 0700027M | CF 100 OHM +-5% 1/16W |
| C5205 | 0890061R | CD 10PF+-5% 50V(SL) | R017 | 0700027M | CF 100 OHM +-5% 1/16W |
| C5206 | 0270734R | PF 0.1MF +-5% 50V | R018 | 0700024M | CF 56 OHM +-5% 1/16W |
| C5207 | 0270734R | PF 0.1MF +-5% 50V | R019 | 0700034M | CF 330 OHM +-5% 1/16W |
| C5208 | 0270734R | PF 0.1MF +-5% 50V | R020 | 0700032M | CF 220 OHM +-5% 1/16W |
| C5209 | 0270734R | PF 0.1MF +-5% 50V | R021 | 0700032M | CF 220 OHM +-5% 1/16W |
| C5210 | 0890118R | CD 22PF +-5% 50V(CH) | R022 | 0700054M | CF 10K OHM +-5% 1/16W |
| C5211 | 0890118R | CD 22PF +-5% 50V(CH) | R023 | 0700054M | CF 10K OHM +-5% 1/16W |
| C5222 | 0270734R | PF 0.1MF +-5% 50V | R030 | 0700032M | CF 220 OHM +-5% 1/16W |
| C5299 | 0270741R | PF 0.33MF +-5% 50V | R031 | 0700043M | CF 1.5K OHM +-5% 1/16W |
| D019 | 2338321M | DI 1SS270 | R032 | 0700029M | CF 150 OHM +-5% 1/16W |
| E001 | 2902269 | 10P MINI PLUG PIN WITH BASE | R033 | 0700027M | CF 100 OHM +-5% 1/16W |
| E1TXT | 2973916A | 10J EH CONNECTOR (L=390) | R035 | 0110207S | MF 27 OHM +-5% 2W |
| IC0001 | 2004691 | IC MM1118XS | R037 | 0700054M | CF 10K OHM +-5% 1/16W |
| IC5201 | 2009902 | IC SAA5281ZP/E | R038 | 0700041M | CF 1K OHM +-5% 1/16W |
| IC5202 | CP00241 | IC T900580 | R050 | 0150262 | VR 2K OHM-B |
| IC5203 | 2007951 | IC M-BR24C02 | R5204 | 0700027M | CF 100 OHM +-5% 1/16W |
| L5201 | 2123781R | PEAKING COIL 100MH | R5205 | 0700027M | CF 100 OHM +-5% 1/16W |
| L5202 | 2123098M | LA AXIAL COIL 4.7MH | R5206 | 0700027M | CF 100 OHM +-5% 1/16W |
| L5203 | 2122956M | LA AXIAL COIL 100MH | R5207 | 0700033M | CF 270 OHM +-5% 1/16W |
| Q001 | CF00865R | TR 2SA1980 Y/G | R5209 | 0700027M | CF 100 OHM +-5% 1/16W |
| Q002 | CF00875R | TR 2SC5343 Y/G | R5210 | 0700047M | CF 3.3K OHM +-5% 1/16W |
| Q003 | 2326875R | TR DTC144WS | R5211 | 0700059M | CF 27K OHM +-5% 1/16W |
| Q004 | CF00875R | TR 2SC5343 Y/G | R5212 | 0700034M | CF 330 OHM +-5% 1/16W |
| Q005 | CF00875R | TR 2SC5343 Y/G | R5213 | 0700036M | CF 470 OHM +-5% 1/16W |





**PRODUCT SAFETY NOTE:** Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

| SYMBOL NO. | PART NO. | DESCRIPTION | SYMBOL NO. | PART NO. | DESCRIPTION |
|---|---|---|---|---|---|
| R5214 | 0700036M | CF 470 OHM +-5% 1/16W | | | |
| R5215 | 0700036M | CF 470 OHM +-5% 1/16W | | | |
| R5216 | 0700036M | CF 470 OHM +-5% 1/16W | | | |
| R5222 | 0700027M | CF 100 OHM +-5% 1/16W | | | |
| R5223 | 0700027M | CF 100 OHM +-5% 1/16W | | | |
| R5224 | 0700041M | CF 1K OHM +-5% 1/16W | | | |
| R5225 | 0700041M | CF 1K OHM +-5% 1/16W | | | |
| R5226 | 0700081M | CF 1M OHM +-5% 1/16W | | | |
| R5231 | 0700046M | CF 2.7K OHM +-5% 1/16W | | | |
| R5232 | 0700049M | CF 4.7K OHM +-5% 1/16W | | | |
| R5233 | 0700049M | CF 4.7K OHM +-5% 1/16W | | | |
| R5251 | 0700036M | CF 470 OHM +-5% 1/16W | | | |
| R5252 | 0700042M | CF 1.2K OHM +-5% 1/16W | | | |
| R5253 | 0700054 | CF 10K OHM +-5% 1/16W | | | |
| R5254 | 0700062 | CF 39K OHM +-5% 1/16W | | | |
| R5255 | 0700054 | CF 10K OHM +-5% 1/16W | | | |
| X5201 | BP00031 | X'TALOSX27X1527MHZ | | | |
| X5202 | 2940241 | CRYSTAL 6 MHZ | | | |
| ZD001 | 2339837M | ZD HZS5C1 | | | |